EPA REGISTRATION N	NUMBER 51	873-10 – VOL	1

Fax

Name:

Thomas A. Tucker

Organization:

Fair Products Inc.

Fax:

919-467-9142

Phone:

919-467-8352

From:

Lana Coppolino

Date:

April 18, 2005

Subject:

Data Call-In Response Form

Pages:

1

Comments:

Mr Tucker:

As we discussed on the phone, the data call-in response form is necessary for the reregistration of MH 96% (EPA Reg. No. 51873-10).

Instructions are found on the Maleic Hydrazide RED document. The RED can be found at http://www.epa.gov/pesticides/ under REDs & Pesticide Reregistration Status.

Please contact me if you have any questions.

Thank you,

Lana Coppolino

Office of Pesticide Programs

Registration Division

United States Environmental Protection Agency Washington, D.C. 20460

DATA CALL-IN RESPONSE

Signature and Title of Company's Authorized Representative

10. Name of Company

OMB Approval 2070-0107 OMB Approval 2070-0057

11. Phone Number

INSTRUCTIONS: Please type or print in ink. Please read carefully the attached instructions and supply the information requested on this form. Use additional sheet(s) if necessary. 3. Date and Type of DCI and Number 2. Case # and Name 1. Company Name and Address FAIR PRODUCTS INC 0381 Maleic Hydrazide 08-Sep-1994 Chemical # and Name 051501 PO Box 386 PRODUCT SPECIFIC Maleic hydrazide CARY, NC 27512 ID# PDCI-051501-0077 6. Generic Data 7. Product Specific Data 4. EPA 5. I wish to Product cancel this Registration product regis-7a. My product is an MUP and I agree to satisfy the MUP 7b. My product is an EUP and 6a. I am claiming a Generic 6b. I agree to satisfy Generic tration volun-I agree to satisfy the EUP Data Exemption because I Data requirements as indicated tarily requirements on the attached requirements on the attached obtain the active ingredient on the attached form entitled form entitled "Requirements from the source EPA regis-"Requirements Status and form entitled "Requirements Status and Registrant's Status and Registrant's tration number listed below. Registrant's Response." Response." Response." 51873-10 N.A. N.A. 8. Certification I certify that the statements made on this form and all attachments are true, accurate, and complete. I acknowledge that any 9. Date knowingly false or misleading statement may be punishable by fine, imprisonment or both under applicable law.

United St. Environmental Protection Agency Washington, D.C. 20460

OMB Approval 2070-0107 OMB Approval 2070-0057

REQUIREMENTS STATUS AND REGISTRANT'S RESPONSE

1. Company Name and Address FAIR PRODUCTS INC PO Box 386 CARY, NC 27512		2. Case # and Name 0381 Maleic Hydraz EPA Reg. No. 51873	0381 Maleic Hydrazide						3. Date and Type of DCI and Number 08-Sep-1994 PRODUCT SPECIFIC ID # PDCI-051501-0077		
Guideline Requirement Number	5. Study Title		P R Progress Reports			6. Use Pattern		7. Test Substance	8. Time Frame (Months)	9. Registrant Response	
			ů.		1 2 3						
61-1	Chemical Identity						A, B, C, D, E, F, G J, K, L, M, N, O	6, H, I	MP or EP, & TGAI	0	
61-2a	Begin. mat. & mnfg. proc							6, H, I	MP or EP, & TGAI	0	
61-2b	Discussion of Impurities							6, H, I	, MP or EP, & TGAI	0	
62-1	Preliminary Analysis				1		A, B, C, D, E, F, G	6, H, I	MP or EP, & TGAI	0	
62-2	Certification of limits						J, K, L, M, N, O A, B, C, D, E, F, G J, K, L, M, N, O	6, H, I	MP or EP, & TGAI	0	
62-3	Analytical Method						A. B. C. D. E. F. G	6, H, I	MP or EP, & TGAI	0	
63-2	Color					STATE OF	J, K, L, M, N, O A, B, C, D, E, F, G	6, H, I	MP or EP, & TGAI	0	
63-3	Physical State						A, B, C, D, E, F, G		MP or EP, & TGAI	0	
63-4	Odor							6, H, I	MP or EP, & TGAI	0	
63-7	Density				1		J, K, L, M, N, O A, B, C, D, E, F, G	S, H, I	, MP or EP, & TGAI	0	
63-12	рН						J, K, L, M, N, O A, B, C, D, E, F, G J, K, L, M, N, O	6, H, I	, MP or EP, & TGAI	0	
knowingly talse or mis	ertify that the statements made on this leading statement may be punishable b Company's Authorized Representative_	orm and all attachments are true, a y fine, imprisonment or both under	ccurat	e, ar	nd co law	mpl	ete. I acknowledge ti	hat an	y 11. Date		

United St Environmental Protection Agency Washington, D.C. 20460

OMB Approval 2070-0107 OMB Approval 2070-0057

REQUIREMENTS STATUS AND REGISTRANT'S RESPONSE

1. Company Name and Address FAIR PRODUCTS INC PO Box 386 CARY, NC 27512		2. Case # and Name 0381 Maleic Hydraz EPA Reg. No. 51873				Date and Type of DCI and Number 08-Sep-1994 PRODUCT SPECIFIC ID # PDCI-051501-0077			
Guideline Requirement Number	5. Study Title			P R Progress Reports		6. Use Pattern	7. Test Substance	8. Time Frame (Months)	9. Registrar Response
			Ĭ.	1 2	3		Establish St.	15	
63-13	Stability				1	A, B, C, D, E, F, G, H, I J, K, L, M, N, O	MP or EP, & TGAI	0	
63-14	Oxidizing/Reducting Action			72		A, B, C, D, E, F, G, H, I J, K, L, M, N, O	MP or EP	0	
63-15	Flammability					A, B, C, D, E, F, G, H, I J, K, L, M, N, O	The state of the s	0	
63-16	Explodability					A, B, C, D, E, F, G, H, I J, K, L, M, N, O	MP or EP	0	
63-17	Storage stability					A, B, C, D, E, F, G, H, I J, K, L, M, N, O	A STATE OF THE PARTY OF THE PAR	0	
63-18	Viscosity					A, B, C, D, E, F, G, H, I J, K, L, M, N, O	MP or EP	0	
63-19	Miscibility					A, B, C, D, E, F, G, H, I J, K, L, M, N, O	MP or EP	0	
63-20	Corrosion characteristics			1		A, B, C, D, E, F, G, H, I J, K, L, M, N, O	MP or EP	0	
63-21	Dielectric breakdown voltage					A, B, C, D, E, F, G, H, I J, K, L, M, N, O	, MP or EP	0	
81-1	Acute oral toxicity in rats			1		A, B, C, D, E, F, G, H, I J, K, L, M, N, O	MP or EP, & TGAI	0	
81-2	Acute dermal toxicity in rabbits or rats					A, B, C, D, E, F, G, H, I J, K, L, M, N, O	MP or EP, & TGAI	0	
81-3	Acute inhalation toxicity in rats					A, B, C, D, E, F, G, H, I J, K, L, M, N, O	MP or EP, & TGAI	0	
л			1						

United States Environmental Protection Agency Washington, D.C. 20460

OMB Approval 2070-0107 OMB Approval 2070-0057

REQUIREMENTS STATUS AND REGISTRANT'S RESPONSE

1. Company Name and Address FAIR PRODUCTS INC PO Box 386 CARY, NC 27512		2. Case # and Name 0381 Maleic Hydrazide EPA Reg. No. 51873-10					08-Sep-1994 PRODUCT SPECI	3. Date and Type of DCI and Number 08-Sep-1994 PRODUCT SPECIFIC ID # PDCI-051501-0077		
Guideline Requirement Number	5. Study Title	PROFOCOL	P R Progress Reports		ss	6. Use Pattern	7. Test Substance	8. Time Frame (Months)	9. Registrant Response	
		L	1	2	3					
81-4	Primary eye imitation in rabbits					A, B, C, D, E, F, C J, K, L, M, N, O	G, H, I, MP or EP	0		
81-5	Primary dermal irritation					A, B, C, D, E, F, C J, K, L, M, N, O	G, H, I, MP or EP	0		
81-6	Dermal sensitization					A, B, C, D, E, F, O	G, H, I, MP or EP			
ס										



Fair Products, Inc.

Thomas A. Tucker

November 8, 2002 EPA Reg. No. 51873

5629 977 002 forwarded 51873 to SRRD/PRB 2-3-03

Ms. Cynthia Giles-Parker, PM 22 Document Processing Desk (AMEND) Office of Pesticide Programs (7504-C) U.S. Environmental Protection Agency Room 266A, Crystal Mall 2 1921 Jefferson Davis Highway Arlington, VA 22202

Subject:

Fair Products, Inc.'s response to EPA letter dated October 3, 2002 but not received by Fair Products, Inc. until October 8, 2002 regarding the MH 96% (EPA Reg. No. 51873-10) 8-month RED documents.

Dear Ms. Parker:

I appreciate your clarification phone call (October 15, 2002) regarding the letter that we received referencing our MH 96% (EPA No. 51873-10) 8-month RED submission of March 6, 1995. According to your communications, EPA has been unable to locate the administrative components of this submission. When you first brought this matter to our attention in March of 2002, Fair Products, Inc. exerted considerable effort in an attempt to locate their original copy of the submittal for re-transmission to EPA. Unfortunately, our efforts to locate the submission failed. As a result of flooding, Fair Products, Inc. has lost a variety of documents previously stored in an off-site facility and we believe the 8-month RED response was among those documents destroyed.

Although these originals are not at hand, Fair Products, Inc. does have assorted correspondence from EPA referencing the 8-month RED submission confirming that it was received, reviewed and eventually approved by EPA including the following letters:

 The cover letter for the submission was located on computer backups dated March 6, 1995. At that time EPA forms were not on computer and had to be completed by hand. Therefore, there are no computer records of the administrative type materials to access.

- Fair Products, Inc. received an Analysis of Compliance on April 6, 1995 confirming receipt of the 8-month response and indicating that "The submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 86-5, etc," and assigning a MRID No. of 436019-00.
- 3. In another letter dated February 10, 1998 from Ms Linda Propst, Chief of the Product Re-registration Branch indicated that the Toxicity studies submitted with the 8-month RED were "acceptable and satisfy data requirements". She went on to say "Your 8 month submission along with the product chemistry (previously accepted) and toxicity reviews will be forwarded to the Re-registration Division Product Manager 22 for finial label review. The Product manger will notify you of any label deficiencies and the finial approval of your label for product re-registration. Should you have any further questions, please contact Veronica Dutch of my staff" etc.
- 4. A letter from your office dated April 16, 2001 stated "A review of all product specific chemistry and acute toxicity data have been completed for the subject product (EPA Reg. 51873-10)." The letter goes on to request several label text changes required for completing the re-registration. These changes were incorporated into our label and resubmitted on May 16, 2001.

Your letter of October 3, 2002 indicates that you are "unable to process the amendment because of failure to submit copies of administrative information required as part of your RED response". The letter goes on to reference the 8-month RED submission.

Fair Products, Inc. has always strived to comply fully with every request from EPA over the years, especially with regard to the MH RED efforts. While the current situation is regrettable, there can be no doubt that Fair Products, Inc. has in good faith already fulfilled all the data requirements of the MH re-registration and supplied those to the agency as directed in the various PR Notices and Data-Call-Ins to support re-registration of their MH products over the past 10+ years.

Fair Products, Inc. understands the need and desire of the agency to have these "administrative information" on file. We are therefore re-submitting the administrative materials that you indicated were missing as per your instructions. Enclosed you will find the following:

- 1. Application for Re-registration form 8570-1
- Completed Data Matrix for MH 96% Technical Grade (51873-10) with MRID citations
- 3. Certification with Respect to Data Compensation Requirements (EPA form 8570-29)

It may be of service to note that the MH Task Force consortium, which is composed of Fair Products, Inc., Uniroyal Chemicals and Drexel Chemicals, generated all of the data required for the MH re-registration (except the Product Specific data). Therefore all data pertaining to this re-registration is owned jointly by the MH Task Force and it's member companies.

We trust the above materials will serve to fulfill your needs and allow Fair Products, Inc.'s re-registration effort on MH the reach a successful conclusion. If we can be of any further assistance please contact us at (919) 467-8352, FAX (919) 467-9142, e-mail, tucker7@attglobal.net.

Sincerely,

Thomas A Tacker Product Manager Agri-Specialties Division Fair Products, Inc.

CC: T.A.T. H.F.G.

risese read instructions of	n reverse before comp	pleting form.		Form A	pprovec	I. OMB No. 20	70-0060	O. Approval expires 2-28-	
SEPA	United States Environmental Protection Agency Washington, DC 20460				V	Registrati Amendm Other		OPP Identifier Number	
		Application	on for Pestic	ide - Se	ction	1			
1. Company/Product Numb 51873-10	. Company/Product Number 51873-10			Product Me nia Giles-P			1	posed Classification	
4. Company/Product (Name Maleic Hydrazide 96%			PM# No. 2	2					
5. Name and Address of Applicant (Include ZIP Code) Fair Products, Inc. , PO Box 386 Cary , NC 27512			(b)(i), to: EPA	6. Expedited Reveiw. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No					
Crieck ii di	is is a new address		Section -	uct Name	-		_		
Resubmission in res Notification - Explain Explanation: Use addition Re-Registration Application *Re-submission of Administ 1995) in accordance with re Note 1: MH 96% Technical	ponse to Agency letter n below. enal page(s) if necessi- erative materials associ- quest for such by Cynt	ery. (For section ated with Fair Pro hia Giles-Parker,	ducts, Inc. 8-month Product Manager 2	Agency le "Me Too" Other - Ex	Applica plain be	tion. low. D case No. 038	l (origina		
products. It is never package 1. Material This Product Wi			Section - I	11					
Child-Resistant Packaging Yes No * Certification must	Unit Packaging Yes No If "Yes" Unit Packaging wg	No. per	Water Soluble P Yes No If "Yes" Package wgt	No. per	r	P	fetal lastic lass aper ther (Sp	ecify) Continuous Batch	
Location of Net Contents		4. Size(s) Reta		1	5. Loca	ation of Label D			
[6.7]	Container	CONTRACTOR AND	N/A, See Note 1		1	}			
3. Manner in Which Label is Glue		Lithogra Paper g Stancila	sph lued	Othe	-				
			Section - IN	/					
1. Contact Point (Complete	items directly below	Tor identification	of individual to be	contacted,	if neces	sary, to proces	s this e	oplication.)	
lame Thomas A. Jucker		/	Title Product Manager			1 1111	phone 1 1-467-15	No. (Include Area Code)	
I certify that the states I acknowledge that an both under applicable	y knowlingth talse or		attachments the					Date Application Raceived (Stomped)	
. Signature	1		Tide Product Manager					Coole open	
Typed Name 1		5.	Date 11/0	3/02				0 00000 0 00000	

8570-29 (Rev-7-91)

United States Environmental Protection Agency Washington, DC 20460

Form Approved OMB No. 2070-0060

SEPA Certification with Respect to Citation of Data Approval Expires 11-30-93 EPA File Symbol/Registration Number Applicants Name and Address Fair Products Inc. P.O. Box 386 Cary NC 27512 51873-10 Maleri Hydrozite 96%. Technical Grade Date of Application NOTE: If your product is a 100% repackaging of another EPA-registered product that you purchase, and is labeled for the same uses, you do not need to submit this form. You must submit the Formulator's Exemption Statement (EPA Form 8570-27). 1. This application is supported by all data submitted or cited in the application. In addition, if cite-all options are indicated, this application is supported by all data in the Agency's files that concern the properties or effects of this product that is identical or substantially similar, and that is one of the types of data that would be required to be submitted if this application sought the initial registration of a product of identical or similar composition and intended uses under the data requirements in effect on the date of approprial of this application. (Check the appropriate boxes, in items 2 and 3 below, that pertain to your application.) 2. I certify that, for each study cited in support of this application for registration that is an exclusive use study, I'am the original submitter*; or I have obtained the written permission of the original data submitter to cite that study* 3. I certify that, for each study cited in support of this application for registration that is not an exclusive use a. M I am the original data submitter*: or I have obtained the written permission of the original data submitter to cite that study*; or b. If have notified in writing the companies that have submitted data I have cited to support this application and have offered to: (a) Pay compensation for those data in accordance with section 3(c)(1)(D) and 3(c)(2)(D) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); and (b) Commence negotiations to determine which data are subject to the compensation requirement of FIFRA and the amount and terms of compensation due, if any. The companies I have notified are: (Check one) All companies listed on the Pesticide Data Submitters List for all active ingredients contained in my product (cite-all method or cite-all option under Selective Method*). (Also, sign the Géneral Offer Statement below.) Those companies that have submitted the studies which I have cited (Selective method*). * A Data Matrix identifying these studies is attached. (Note: a Data Matrix is not required under the cite-all method. Thomas A Tucker Product iture General Offer to Pay: I hereby offer and agree to pay compensation to other persons, with regard to the approval of this application, to the extent required. Name and Title ture Thomas A Tucker May 3/6/1995

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

O F, F	ICI	A	L	U	S	E
Postage Certified Fee Return Receipt Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Required) Total Postage & Fees	\$	7	5		tmark ere	0
Street, Apt. No.; or PO Box No. City, State, ZIP+ 4 PS Form 3800, Janua	o. Box	10 3 205	86	verse fo	r Instri	Iclians

Certified Mail Provides:

- A mailing receipt
- A unique identifier for your malipiece
- A signature upon delivery
- A record of delivery kept by the Postal Service for two years

Important Reminders:

- Certified Mail may ONLY be combined with First-Class Mail or Priority Mail.
- Certified Mail is not available for any class of international mail.
- NO INSURANCE COVERAGE IS PROVIDED with Certifled Mail. For valuables, please consider Insured or Registered Mail.
- For an additional fee, a Return Receipt may be requested to provide proof of delivery. To obtain Return Receipt service, please complete and attach a Return Receipt (PS Form 3811) to the article and add applicable postage to cover the fee. Endorse malipiece "Return Receipt Requested". To receive a fee waiver for a duplicate return receipt, a USPS postmark on your Certified Mali receipt is required.
- For an additional fee, delivery may be restricted to the addressee or addressee's authorized agent. Advise the clerk or mark the mailpiece with the endorsement "Restricted Delivery".
- If a postmark on the Certified Mail receipt is desired, please present the article at the post office for postmarking. If a postmark on the Certified Mail receipt is not needed, detach and affix label with postage and mail.

IMPORTANT: Save this receipt and present it when Anaking an inquiry.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

CERTIFIED MAIL

OCT 3 Zook

Karen Ferrand Fair Products, Inc. P.O. Box 386 Cary, NC 27511

Subject:

Maleic Hydrazide 96% - Reregistration Eligibility Decision.

EPA Registration No. 51873-10 Submission dated May 16, 2001

Dear Ms. Ferrand:

We are unable to process the subject amendment because of failure to submit copies of the administrative information required as part of your RED response. Please provide the Registration Division with copies of the administrative materials that were sent to the Special Review and Reregistration Division in the 8 month response package.

Pleases submit this information within thirty (30) days from receipt of this letter.

Sincerely,

15/

Cynthia Giles-Parker Product Manager 22 Fungicide Branch Registration Division (7505C)

MALEIC HYDRAZIDE 96% TECHNICAL GRADE A HERBICIDE FOR FORMULATING USE ONLY

Active Ingredient:	Maleic Hydrazide (1,2-Dihydro-3,6-pyridazinedione)96%
Inert Ingredient:	4%

EPA Reg. No. 51873-10

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

PERSONAL PROTECTION EQUIPMENT APPLICATORS AND OTHER HANDLERS MUST WEAR:

- Long sleeved shirt and long pants
- · Shoes plus socks
- · Protective eyewear
- Chemical resistant gloves

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

FIRST AID

If inhaled	•Move person to fresh air.
	•If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
	 Call a poison control center or doctor for further treatment advice.
If on skin or	Take off contaminated clothing
clothing	 Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
If in eyes	•Hold eye open and rinse slowly and gently with water for 15-20 minutes.
	 Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
	Call a poison control center or doctor for treatment advice.
If swallowed	•Call poison control center or doctor immediately for treatment

advice.

- •Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by the poison control center or doctor
- •Do not give anything by mouth to an unconscious person.

USER SAFETY RECOMMENDATION

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

ENVIRONMENTAL HAZARDS

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, ocean or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the sewage plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Storage should be under lock and key and secure from access by unauthorized persons and children. Storage should be in a cool dry area away from any heat or ignition source. Do not stack over 2 pallets high. Move bags carefully so as not to tear or puncture. Do not move containers from one area to another unless they are securely sealed. Keep container tightly sealed when not in use. Do not allow material to become wet or store in a damp, bumid area. Keep away from any puncture source. Avoid storage near water supplies, food, feed and fertilizer to avoid contamination. Store in original container only. If the contents are leaking or material is spilled follow these steps:

- Collect and place in suitable containers for disposal.
- 2. Wash area with water and soap to remove remaining pesticide.
- 3. Follow washing with clean water rinse.
- 4. Do not allow run off to enter sewer or contaminate water supplies.
- Dispose of waste as indicated below.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Fiber drums with liners – Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into applications equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner. Paper and plastic bags – Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

APR 1 6 2001

CERTIFIED MAIL

Kimberly Ratliff Fair Products, Inc. P.O. Box 386 Cary, NC 27511

Dear Mr. Ratliff:

Subject:

EPA Registration No. 51873-10

Review of Labels for Maleic Hydrazide Reregistration Eligibility Decision (RED)

A review of all the product specific chemistry and acute toxicity data have been completed for the subject product. A review of the labels submitted with your submission has been completed and the labels are unacceptable.

Please make the following label changes:

- Revise your Statement of Practical Treatment (First Aid) section in accordance with PR Notice 2001-1.
- Revise your ingredient statement to read as follows:

- The following Precautionary Statements are required:
 - "Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling."
- 4. The Environmental Hazard Statement should read "Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, ocean or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the sewage plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

Please submit five copies of draft labeling incorporating the above changes for review within 30 days from receipt of this letter. If you have any questions, please contact me at (703) 305-7740.

Sincerely,

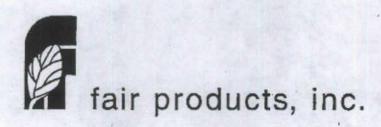
Cynthia Giles-Parker

Product Manager (22)

Fungicide Branch

Registration Division (7505C)

Offil for



May 16, 2001

Ms. Cynthia Giles-Parker
United States Environmental Protection Agency
Product Manager (22), Fungicide Branch
Registration Division (7505C)
Ariel Rios Bldg.
1200 Pennsylvania Avenue
Mail Code 7505C
Washington, D.C. 20460

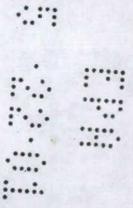
Subject: Review of Labels for Maleic Hydrazide Reregistration Eligibility Decision, EPA Registration No. 51873-10

I have incorporated the changes you requested to the label for Reg. No. 51873-10 per your letter received April 16, 2001 (attached). Enclosed are five copies of the revised draft label. Please call me at (919) 834-4984 if you have any questions regarding this label. Thank you for your assistance with this project.

Sincerely,

Karen H. Ferrand

Attachment Enclosures



2.

- Make the labeling changes listed below before you you release the product for shipment:
 - a. Add the phrase "EPA Registration No. 51873-10.
- b. Change the product name to "haleic Hydrazide 96% Terchnical Grade", since your data supports this percent active ingredient.
 - c. Change the ingradient statement to read:

ATTACHMENT IS APPLICABL		
SIGNATURE OF APPROVING PETIC		I DATE !
Mut J. Chu	N	8/13/41
PA Form 8570-6 (Rev. 5-76)	PREVIOUS EDITION MAY BE	USED UNTIL SUPPLY IS EXHAUSTED

Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

Sincerely yours,

Robert J. Taylor Product Manager 25 Fungicide-Herbicide Branch Registration Division (H7505C)

Enclosure

ACCEPTED AUG 13 1991

Under the Federal Insecticide. Fungicide, and Redenticide Act. us amended, for the pesticide EPA Reg. No.5/873-/0

MALEIC HYDRAZI

TECHNICAL GRADE

A HERBICIDE FOR FORMULATING

ACTIVE INGREDIENTS: MALEIC HYDRAZIDE, (1,2-Dihyd INERT INGREDIENTS:....

KEEP OUT OF REACH OF CHILDRE CAUTION

DE 96%

(Upper Portion)

USE ONLY

ro-3,6-pyridazinedione...96% 1 NET CONTENTS: 44 LBS.NET/BAG

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION. Harmful if swallowed [inhaled or absorbed through the skin]. Avoid breathing vapors [dust or spray mist]. Avoid contact with skin (eyes or clothing). Avoid contact with skin, eyes or clothing. In case of contact immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists. Wear a long-sleeve shirt, long pants, and chemical resistant gloves at all times when mixing, loading, handling, or applying this chemical. STATEMENT OF PRACTICAL TREATMENT IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 galsses of water and induce vamiting by rouching back of throat with finger. Repeat until vamit fluid is clear. Do not induce vamiting or give anything by mouth to an unconscious person.

IF SPLASHED IN EYES: Immediately flush eyes with plenty of water and get medical attention.

IF SPILLED ON SKIN: Immediately remove containingted clothing. INCLUDING SHOES, and wash skin with soap and plenty of water. If irritation develops, send for a physician. ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Birds and other wildlife in treated areas may be killed. Do not apply directly to streams, lakes or ponds. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water unless this product is specifically identified and addressed in the NPORS permit. Do not discharge effluent containing this product into sewer systems without previously notifying the sower treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal Storage should be under lock and key and secure from access by unauthorized persons and children. Storage should be in a cool dry area away from any heat or ignition source. Do not stack over 2 pallets high. Move bags carefully so as not to tear or puncture. Do not move containers from one area to another unless they are securely sealed. Keep container tightly sealed when not in use. Do not allow material to become wet or store in a damp, humid area. Keep away from any puncture source. Avoid storage near water supplies, food, feed and fertilizer to avoid contamination. Store in original container only. If the contents are leaking or material is spilled follow these steps:

Collect and place in suitable containers for disposal.

Wash area with water and soap to remove remaining pesticide.

3. Follow washing with clean water rinse.

Do not allow run off to enter sewer or contaminate water supplies.

Dispose of waste as indicated below.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesitcide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office

CONTAINER DISPOSAL: Fiber drums with liners-Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into applications equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner. Paper and plastic bags-Completely empty bag into application equipment. Them dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

32 of 52

From PPLS



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

APR 1 6 2001

CERTIFIED MAIL

Kimberly Ratliff Fair Products, Inc. P.O. Box 386 Cary, NC 27511

Dear Mr. Ratliff:

Subject:

EPA Registration No. 51873-10

Label

Review of Labels for Maleic Hydrazide Reregistration Eligibility Decision (RED)

A review of all the product specific chemistry and acute toxicity data have been completed for the subject product. A review of the labels submitted with your submission has been completed and the labels are unacceptable.

Please make the following label changes:

- Revise your Statement of Practical Treatment (First Aid) section in accordance with PR Notice 2001-1.
- Revise your ingredient statement to read as follows:

3. The following Precautionary Statements are required:

"Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling."

4. The Environmental Hazard Statement should read "Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, ocean or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the sewage plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mallpiece, or on the front if space permits. 1. Article Addressed to: Kinnberly Ratliff Fair Products, Ore Cary, NC 275 MSPS	A. Received by (Please Print Clearly) B. Date of Delivery C. Signature Agent Addressee D. Is delivery address different from item 1? Yes If YES, enter delivery address below: No 3. Service Type Acertified Mail Registered Return Receipt for Merchandise
	☐ Insured Mail ☐ C.O.D.
	4. Restricted Delivery? (Extra Fee)
2. Article Number (Copy from service label) 9099 3400 0018	7685 30246
PS Form 3811, July 1999 Domestic Retu	ırn Receipt 102595-00-M-0952

THE OWNER.

UNITED STATES POSTAL SERVICE

04/20/01 22:07 NC RTR 276 1884

First-Class Mail Postage & Fees Paid USPS Permit No. G-10

 Sender: Please print your name, address, and ZIP+4 in this box Cynthin Giles - Parker 1200 Penn an n. W. Washington, D.C. 20460 (7505C) PM 22 Reg.# 51873-10

25

Please submit five copies of draft labeling incorporating the above changes for review within 30 days from receipt of this letter. If you have any questions, please contact me at (703) 305-7740.

Sincerely,

Cynthia Giles-Parker

Product Manager (22)

Fungicide Branch

Registration Division (7505C)

Maleic Hydrazide 96% **Technical Grade**

A Herbicide for Formulating Use Only **ACTIVE INGREDIENTS:**

MALEIC HYDRAZIDE.

(1,2-Dihydro-3,6-pyridazinedione).....96%

INERT INGREDIENTS......4%

NET CONTENT: 44 LBS.NET/BAG

KEEP OUT OF REACH OF CHILDREN CAUTION

EPA Registration No. 51873-10 EPA Establishment No. 45671-NC-01 Manufactured by: FAIR PRODUCTS, INC. Post Office Box 386 Cary, North Carolina 27512

Storage should be in a cool dry place away from any heat

Move bags carefully so as not to tear or puncture. Do not

securely sealed. Keep container tightly sealed when not in

storage near water supplies food, feed and fertilizer to avoid

or ignition source. Do not stack over two pallets high.

move containers from area to another unless they are

use. Do not allow material to become wet or store in a

damp, humid area. Avoid any puncture source. Avoid

contamination. Store in original container only. If the

contents are leaking or material is spilled follow these 1. Collect and place in suitable containers for disposal.

2. Wash area with water and soap to remove remaining

4. Do not allow runoff to enter sewer or contaminate water

PESTICIDE DISPOSAL: Pesticide wastes are toxic.

Improper disposal of excess pesticide, spray mixture or

rinsate is a violation of Federal Law. If these wastes can

not be disposed of by use according to label instructions,

Control Agency, or the Hazardous Waste representative at

contact your local or State Pesticide or Environmental

3. Follow washing with clean water rinse.

Dispose of waste as indicated below.

- Add Total

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION: Harmful if swallowed. (inhaled or absorbed through skin). Avoid breathing vapors (dust or spray mist). Avoid contact with skin, eyes or clothing. In case of contact immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists. Wear a long sleeved shirt, long pants, and chemical resistant gloves at all times when mixing loading, handling or applying this

IF SWALLOWED: Call a physician or Poison control

vomit fluid is clear. Do not induce vomiting or give anything by mouth to an unconscious person.

large volume of water and get medical attention. IF SPILLED ON SKIN: Immediately remove

contaminated clothing INCLUDING SHOES AND SOCKS, and wash skin with soap and plenty of water. If Irritation develops, send for a physician.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Birds and other wildlife in treated areas may be killed. Do not apply directly to streams, lakes, or ponds. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water unless this product is specifically identified and addressed in the NPDES permit. Do not discharge effluent containing this product into sewer systems without previously notifying the sewer treatment plant authority. For guidance contact your State Water Board or Regional Office at the EPA.

PHYSICAL OR CHEMICAL HAZARDS Do not store near heat or open flame

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. No end use for this product is intended or implied by this label. Formulator using this product are responsible for obtaining EPA registration of their formulated products.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Storage should be under lock and key and secure from access from unauthorized persons or children. CONTAINER DISPOSAL: FIBER DRUMS WITH

the nearest EPA Regional office for guidance.

LINERS: Completely empty liner into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by State and Local authorities. If drum is contaminated dispose of in the same manner. PAPER AND PLASTIC BAGS: Completely empty bags into application equipment. Then discose of empty bag in a sanitary landfill or by incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

WARRANTY and CONDITION OF SALE:

Fair Products, Inc. warrant that this product conforms to the chemical description and is reasonably fit for the purposes referred to tin the directions for use. Fair Products, Inc. makes no other warranties, express or implied, including FITNESS or MERCHANGABILITY. In no case shall Fair Products, Inc. or the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. The foregoing is a condition of sale by Fair Products, Inc. and is accepted as such by any buyer.

STATEMENT OF PRACTICAL TREATMENT

center. Drink 1 or 2 glasses of water and induce vomiting by touching the back of the throat with finger. Repeat until

IF SPLASHED IN EYES: Immediately flush eyes with a

Maleic Hydrazide 96% Technical Grade

A Herbicide for Formulating Use Only ACTIVE INGREDIENTS:
MALEIC HYDRAZIDE,
(1,2-Dihydro-3,6-pyridazinedione).....96%

NET CONTENT, 441 DC NET/DAC

NET CONTENT: 44 LBS.NET/BAG

KEEP OUT OF REACH OF CHILDREN CAUTION

EPA Registration No. 51873-10 EPA Establishment No. 45671-NC-01

Manufactured by: FAIR PRODUCTS, INC. Post Office Box 386 Cary, North Carolina 27512

PRECAUTIONARY STATEMENTS

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STATEMENT OF PRACTICAL TREATMENT
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by touching the back of the throat with finger. Repeat until
vomit fluid is clear. Do not induce vomiting or give anything
by mouth to an unconscious person.

IF SPLASHED IN EYES: Immediately flush eyes with a large volume of water and get medical attention.

IF SPILLED ON SKIN: Immediately remove contaminated clothing INCLUDING SHOES AND SOCKS, and wash skin with soap and plenty of water. If irritation develops, send for a physician.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Birds and other wildlife in treated areas may be killed. Do not apply directly to streams, lakes, or ponds. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water unless this product is specifically identified and addressed in the NPDES permit. Do not discharge effluent containing this product into sewer systems without previously notifying the sewer treatment plant authority. For guidance contact your State Water Board or Regional Office at the EPA.

PHYSICAL OR CHEMICAL HAZARDS

Do not store near heat or open flame

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. No end use for this product is intended or implied by this label. Formulator using this product are responsible for obtaining EPA registration of their formulated products.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Storage should be under lock and key and secure from access from unauthorized persons or children.

Storage should be in a cool dry place away from any heat or ignition source. Do not stack over two pallets high. Move bags carefully so as not to tear or puncture. Do not move containers from area to another unless they are securely sealed. Keep container tightly sealed when not in use. Do not allow material to become wet or store in a damp, humid area. Avoid any puncture source. Avoid storage near water supplies food, feed and fertilizer to avoid contamination. Store in original container only. If the contents are leaking or material is spilled follow these steps:

- 1. Collect and place in suitable containers for disposal.
- Wash area with water and soap to remove remaining pesticide.
- 3. Follow washing with clean water rinse.
- 4. Do not allow runoff to enter sewer or contaminate water
- 5. Dispose of waste as indicated below.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes can not be disposed of by use according to label instructions, contact your local or State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional office for guidance.

CONTAINER DISPOSAL: FIBER DRUMS WITH LINERS: Completely empty liner into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by State and Local authorities. If drum is contaminated dispose of in the same manner. PAPER AND PLASTIC BAGS: Completely empty bags into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

WARRANTY and CONDITION OF SALE:

Fair Products, Inc. warrant that this product conforms to the chemical description and is reasonably fit for the purposes referred to tin the directions for use. Fair Products, Inc. makes no other warranties, express or implied, including FITNESS or MERCHANGABILITY. In no case shall Fair Products, Inc. or the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. The foregoing is a condition of sale by Fair Products, Inc. and is accepted as such by any buyer.

Maleic Hydrazide 96% Technical Grade

A Herbicide for Formulating Use Only ACTIVE INGREDIENTS:

MALEIC HYDRAZIDE,

(1,2-Dihydro-3,6-pyridazinedione).....96%

NET CONTENT: 44 LBS.NET/BAG

KEEP OUT OF REACH OF CHILDREN CAUTION

EPA Registration No. 51873-10 EPA Establishment No. 45671-NC-01

Manufactured by: FAIR PRODUCTS, INC. Post Office Box 386 Cary, North Carolina 27512

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- 3. Follow washing with clean water rinse.
- Do not allow runoff to enter sewer or contaminate water supplies.
- 5. Dispose of waste as indicated below.

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WARRANTY and CONDITION OF SALE:
Fair Products, Inc. warrant that this product conforms to the chemical description and is reasonably fit for the purposes referred to tin the directions for use. Fair Products, Inc. makes no other warranties, express or implied, including FITNESS or MERCHANGABILITY. In no case shall Fair Products, Inc. or the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. The foregoing is a condition of sale by Fair Products, Inc. and is accepted as such by any buyer.

PROJ DATE:

DP BARCODE: D243082

CASE: 044334 SUBMISSION: S510600

DATA PACKAGE RECORD

BEAN SHEET

DATE: 02/11/98 Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REGISTRATION ACTION: 674 8 MNTH RESP-PROD SPC DATA

96.0000% CHEMICALS: 051501 Maleic hydrazide

ID#: 051873-00010 Maleic Hydrazide 96% Technical Grade

COMPANY: 051873 FAIR PRODUCTS INC

PRODUCT MANAGER: 22 CYNTHIA GILES-PARKER 703-305-7740 ROOM: CM2 247 PM TEAM REVIEWER: VERONICA DUTCH 703-308-8585 ROOM: CS1 1L4

RECEIVED DATE: 04/15/95 DUE OUT DATE: 10/12/95

* * * DATA PACKAGE INFORMATION * * *

EXPEDITE: N DATE SENT: 02/11/98 DATE RET.: / / DP BARCODE: 243082

CHEMICAL: 051501 Maleic hydrazide

DP TYPE: 001 Submission Related Data Package

CSF: Y LABEL: Y DATE IN DATE OUT ADMIN DUE DATE: 05/12/98 ASSIGNED TO NEGOT DATE:

DIV : RD BRAN: FB SECT: PM22 REVR : CONTR:

* * * DATA REVIEW INSTRUCTIONS * * *

Recommended for completed reregistration for Maleic Hydrazide (RED). Please close out this data package and all 674's after your final review of the label. All reviews, CSF and label are included.

* * * DATA PACKAGE EVALUATION * * *

No evaluation is written for this data package

* * * ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION * * *

DP BC BRANCH/SECTION DATE OUT DUE BACK INS CSF LABEL 06/17/97 09/15/97 229215 Y Y Y TRB/IO 242887 PRB 02/05/98 05/06/98 Y Y Y

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This to you this
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Mersing, Please
deliver these to the
Im's in CM-2, I have
the names and locations
in the left hand corner
of each top, page. Thanks

CERTIFIED MAIL Z 310 719 698

Fair Products, Inc. P.O. Box 386 Cary, NC 27511 Attn: Thomas A. Tucker

Subject: Review of Acute Toxicity Data for Maleic Hydrazide

EPA Reg No. 51873-10.

Dear Mr. Tucker:

The Agency has reviewed your toxicity studies (MRIDs 00079657, 00079658, 41185401, 00079661, 00079660, and 41289102 for EPA Reg. Reg. No. 51873-10 and determined that Guidelines 81-1, 81-2, 81-3, 81-4, 81-5, and 81-6 were acceptable and satisfy data requirements. The Agency has previously accepted your product chemistry studies.

Your 8 month submission along with the product chemistry and toxicity reviews will be forwarded to the Reregistration Division Product Manager 22 for final label review. The Product Manager will notify you of any label deficiencies and the final approval of your label for product reregistration.

Should you have any further questions, please contact Veronica Dutch of my staff at 703-308-8585.

Sincerely,

Linda S. Propst, Chief Product Reregistration Branch Special Reviewand Reregistration Division



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY eynthis - cules w

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM:

Date:

January 28, 1997

Subject:

Reregistration review of Maleic hydrazide (96% technical grade)

for requirement of acute toxicity data.

EPA Reg. No.: 51873-00010 DP Barcode: D229215

Case No .:

044334

From:

Hari Mukhoty, DVM, PhD

Product Reregistration Branch (PRB) UPB 2/2/98

Special Review and Reregistration Division (SRRD), Mail Code: 7508W

To:

Veronica Dutch, CRM

PRB, SRRD, Mail Code: 7508W

Applicant:

Fair Product Inc.

P.O.Box 386

Cary, NC 27512

FORMULATION FROM LABEL:

Active Ingredients: % by wt.

Maleic Hydrazide......96 Inert ingredient.....4

Total

100

BACKGROUND:

Fair Products Inc. has cited the acute toxicity data used in the RED to support the reregistration of product Reg. No. 051873-00010 (Maleic Hydrazide - 96% technical grade). The test material was 97.8% potassium salt of Maleic Hydrazide Reg. No. 400-97. Both products are in Batch 1 of the RED. The Agency has also decided that Maleic Hydrazide and its potassium salt are to be considered equivalent with respect to their acute toxic effects. The Uniroyal Chemical Company has supplied the acute toxicity data to the Agency on technical grade Maleic Hydrazide. The Agency found the data acceptable for classification of acute toxic effects of the test substance (TB/HED Memorandum dated October 12, 1993). MRIDs are 00079657, 00079658, 41185401, 00079661, 00079660, and 41289102.

RECOMMENDATION:

There is no need for the additional acute toxicity studies for the reregistration of product Maleic Hydrazide, EPA Reg. No.51873-10. The recommendation is based on the following:

- (a). The concentration of Maleic Hydrazide in product Reg. No. 51873-10 is 96%. The concentration of the test material used in the RED for classification of Maleic Hydrazite is 97.8%. The difference in the amount of active ingredients between the two products is insignificant in terms of acute toxic effects.
 - (b). As mentioned in the RED, the Agency has placed both products in Batch 1.
- (c). The MRIDs mentioned in the Bean Sheet (DP Barcode D229215) correspond with the MRIDs in the RED.

The acute toxicity profile for product Reg. No. 400-97 is currently:

Acute oral toxicity	IV	Acceptable
Acute dermal toxicity	IV	Acceptable
Acute inhalation toxicity	Ш	Acceptable
Primary eye irritation	Ш	Acceptable
Primary Dermal irritation	IV	Acceptable
Dermal sensitization	Non-sensitizer	Acceptable

LABELING:

ID #: 051873-00010 Maleic Hydrazide 96% Technical Grade

AGRICULTURAL USE REQUIREMENTS:

DIRECTION FOR USE:

For early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, wear: coveralls over long-sleeved shirt and long pants, socks and chemical resisitant footwear and waterproof gloves.

SIGNAL WORD: CAUTION

PRECAUTIONARY STATEMENT:

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear longsleeved shirt and long pants, socks and shoes. Wash thoroughly with soap and water after handling.

STATEMENT OF PRACTICAL TREATMENT (SOPT):

IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM:

Date:

January 28, 1997

Subject:

Reregistration review of Maleic hydrazide (96% technical grade)

for requirement of acute toxicity data.

EPA Reg. No.: 51873-00010 DP Barcode: D229215

Case No.:

044334

From:

Hari Mukhoty, DVM, PhD

Product Reregistration Branch (PRB) 18 2/2/98

Special Review and Reregistration Division (SRRD), Mail Code: 7508W

To:

Veronica Dutch, CRM

PRB, SRRD, Mail Code: 7508W

Applicant:

Fair Product Inc. P.O.Box 386

Cary, NC 27512

FORMULATION FROM LABEL:

Active Ingredients: % by wt.

Maleic Hydrazide......96
Inert ingredient......4

Total

100

BACKGROUND:

Fair Products Inc. has cited the acute toxicity data used in the RED to support the reregistration of product Reg. No. 051873-00010 (Maleic Hydrazide - 96% technical grade). The test material was 97.8% potassium salt of Maleic Hydrazide Reg. No. 400-97. Both products are in Batch 1 of the RED. The Agency has also decided that Maleic Hydrazide and its potassium salt are to be considered equivalent with respect to their acute toxic effects. The Uniroyal Chemical Company has supplied the acute toxicity data to the Agency on technical grade Maleic Hydrazide. The Agency found the data acceptable for classification of acute toxic effects of the test substance (TB/HED Memorandum dated October 12, 1993). MRIDs are 00079657, 00079658, 41185401, 00079661, 00079660, and 41289102.

RECOMMENDATION:

There is no need for the additional acute toxicity studies for the reregistration of product Maleic Hydrazide, EPA Reg. No.51873-10. The recommendation is based on the following:

- (a). The concentration of Maleic Hydrazide in product Reg. No. 51873-10 is 96%. The concentration of the test material used in the RED for classification of Maleic Hydrazite is 97.8%. The difference in the amount of active ingredients between the two products is insignificant in terms of acute toxic effects.
 - (b). As mentioned in the RED, the Agency has placed both products in Batch 1.
- (c). The MRIDs mentioned in the Bean Sheet (DP Barcode D229215) correspond with the MRIDs in the RED.

The acute toxicity profile for product Reg. No. 400-97 is currently:

Acute oral toxicity	IV	Acceptable
Acute dermal toxicity	IV	Acceptable
Acute inhalation toxicity	Ш	Acceptable
Primary eye irritation	Ш	Acceptable
Primary Dermal irritation	IV	Acceptable
Dermal sensitization	Non-sensitizer	Acceptable

LABELING:

ID #: 051873-00010 Maleic Hydrazide 96% Technical Grade

AGRICULTURAL USE REQUIREMENTS:

Acute Toy

DIRECTION FOR USE:

For early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, wear: coveralls over long-sleeved shirt and long pants, socks and chemical resisitant footwear and waterproof gloves.

SIGNAL WORD: CAUTION

PRECAUTIONARY STATEMENT:

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear longsleeved shirt and long pants, socks and shoes. Wash thoroughly with soap and water after handling.

STATEMENT OF PRACTICAL TREATMENT (SOPT):

IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists.

DP BARCODE: D229215

CASE: 044334 SUBMISSION: S510600 DATA PACKAGE RECORD

BEAN SHEET

DATE: 06/17/97 Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REGISTRATION ACTION: 674 8 MNTH RESP-PROD SPC DATA

RANKING : 0 POINTS ()

CHEMICALS: 051501 Maleic hydrazide

96.0000%

VID#: 051873-00010 Maleic Hydrazide 96% Technical Grade

COMPANY: 051873 FAIR PRODUCTS INC

PRODUCT MANAGER: 25 PHILIP ERRICO 703-305-6027 ROOM: CM2 PM TEAM REVIEWER: VERONICA DUTCH 703-308-8585 ROOM: CS1 1L4

RECEIVED DATE: 04/15/95 DUE OUT DATE: 10/12/95

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 229215 EXPEDITE: N DATE SENT: 06/17/97 DATE RET.: /

CHEMICAL: 051501 Maleic hydrazide

DP TYPE: 001 Submission Related Data Package

CSF: Y LABEL: Y SSIGNED TO DATE IN

DIV : RD BRAN: RSB SECT: PRS REVR :

CONTR:

NOV25/97/

DATE OUT Feb13198

ADMIN DUE DATE: 09/15/97

NEGOT DATE: / / PROJ DATE:

* * * DATA REVIEW INSTRUCTIONS * * *

Please review acute tox. 6 pack for 8 month response for reregistration of Maleic Hydrazide for guidelines and MRIDs: These MRIDs were reviewed and accepted in the RED for Tech ..

81-1--0079657

81-2--0079658

81-3--41185401

81-4--0079661

81-5--0079660

81-6--41289101

* * * DATA PACKAGE EVALUATION * * *

No evaluation is written for this data package

* * * ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION * * *

DP BC BRANCH/SECTION DATE OUT DUE BACK INS CSF LABEL



Maleic Hydrazide 96% Technical Grade

A Herbicide for Formulating Use Only ACTIVE INGREDIENTS:

MALEIC HYDRAZIDE,

(1,2-Dihydro-3,6-pyridazinedione).....96%

INERT INGREDIENTS......4%

NET CONTENT: 44 LBS.NET/BAG

CAUTION CAUTION

EPA Registration No. 51873-10 EPA Establishment No. 45671-NC-01 Manufactured by: FAIR PRODUCTS, INC. Post Office Box 386 Cary, North Carolina 27512

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION: Harmful if swallowed. (inhaled or absorbed through skin). Avoid breathing vapors (dust or spray mist). Avoid contact with skin, eyes or clothing. In case of contact immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists. Wear a long sleeved shirt, long pants, and chemical resistant gloves at all times when mixing loading, handling or applying this chemical.

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Call a physician or Poison control center. Drink 1 or 2 glasses of water and induce vomiting by touching the back of the throat with finger. Repeat until vomit fluid is clear. Do not induce vomiting or give anything by mouth to an unconscious person.

IF SPLASHED IN EYES: Immediately flush eyes with a large volume of water and get medical attention.

IF SPILLED ON SKIN: Immediately remove contaminated clothing INCLUDING SHOES AND SOCKS, and wash skin with soap and plenty of water. If irritation develops, send for a physician.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Birds and other wildlife in treated areas may be killed. Do not apply directly to streams, lakes, or ponds. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water unless this product is specifically identified and addressed in the NPDES permit. Do not discharge effluent containing this product into sewer systems without previously notifying the sewer treatment plant authority. For guidance contact your State Water Board or Regional Office at the EPA.

PHYSICAL OR CHEMICAL HAZARDS

Do not store near heat or open flame

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. No end use for this product is intended or implied by this label. Formulator using this product are responsible for obtaining EPA registration of their formulated products.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Storage should be under lock and key and secure from access from unauthorized persons or children. Storage should be in a cool dry place away from any heat or ignition source. Do not stack over two pallets high. Move bags carefully so as not to tear or puncture. Do not move containers from area to another unless they are securely sealed. Keep container tightly sealed when not in use. Do not allow material to become wet or store in a damp, humid area. Avoid any puncture source. Avoid storage near water supplies food, feed and fertilizer to avoid contamination. Store in original container only. If the contents are leaking or material is spilled follow these steps:

- 1. Collect and place in suitable containers for disposal.
- Wash area with water and soap to remove remaining pesticide.
- 3. Follow washing with clean water rinse.
- Do not allow runoff to enter sewer or contaminate water supplies.
- 5. Dispose of waste as indicated below.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes can not be disposed of by use according to label instructions, contact your local or State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional office for guidance.

CONTAINER DISPOSAL: FIBER DRUMS WITH LINERS: Completely empty liner into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by State and Local authorities. If drum is contaminated dispose of in the same manner. PAPER AND PLASTIC BAGS: Completely empty bags into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, of allowed by State and Local authorities, by burning. If burned, stay out of smoke.

WARRANTY and CONDITION OF SALE:

Fair Products, Inc. warrant that this product conforms to the chemical description and is reasonably fit for the purposes referred to tin the directions for use. Fair Products, Inc. makes no other warranties, express or implied, including FITNESS or MERCHANGABILITY. In no case shall Fair Products, Inc. or the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. The foregoing is a condition of sale by Fair Products, Inc. and is accepted as such by any buyer.

81-5	Primary Skin Irritation	1-6-78	Un al	NA	00079660
81-6	Dermal Sensitization	11-2-89	MH Task Force	P	41289101

8. DATA REQUIREMENTS		9. SOURCE OF DATA SATISFYING REQUIREMENT							
8a. GUIDE- LINE NO. 158,345	8b. NAME OF TEST Toxicology	9a. SUBMITTED BY APPLICANT	9b. DATE SUBMIT- TED	9c. SUBMITTED BY ANOTHER PERSON/FIRM (GIVE NAME)	9d. PERMISSION (P) OR OFFER TO PAY (OTP)	9f. N.A. OR WAIVER	10. MRID NUMBER		
81-1	Acute Oral toxicity - Rat		1-6-78	Uniroyal	NA		00079657		
81-2	Acute Dermal Toxicity - Rabbit		1-6-78	Uniroyal	NA		00079658		
81-3	Acute Inhalation Toxicity - Rat		7-31-89	MH Task Force	P		41185401		
81-4	Primary Eye Irritation		1-6-78	Uniroyal	NA		00079661		



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

MAY 6 1997

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

CERTIFIED MAIL P 060 146 911

Thomas A Tucker Fair Products, Inc. P.O. Box 386 Cary, NC 27511

Subject: Review of Product Chemistry Data for Maleic Hydrazide

Reregistration Eligibility Decision (RED), EPA Reg No.

51873-10 MALEIC HYDRAZIDE 96% TECHNICAL GRADE.

Dear Mr. Tucker:

The Agency's review for the cited product and acute toxicity studies determined the following:

For guideline series 61-1, 2, 3, 62-1,2,3, 63-2, 3, 4, 5, 7, 8, 9, 10, 12, 63-13, 14, 17, and 63-20, MRIDs 4123320, 41280701, 41185402, 411854003, 41221801, 41165401, 42056001, and 42005601 were found to be acceptable. The Confidential Statement of Formula dated January 3, 1991 agrees with the label claims and is acceptable. No additional information is required at this time.

Should you have any further questions please contact Veronica Dutch at 703-308-8585.

Sincerely,

Linda S. Propst, Chief

Product Reregistration Branch

Special Review and

Reregistration Division

DATE OUT: Nov. 7, 1996

SUBJECT: EP [] MP [] PRODUCT CHEMISTRY REVIEW

DP BARCODE No.: D229218 REG./File Symbol No.: 51873-10

PRODUCT NAME: Maleic Hydrazide 96% Technical Grade

COMPANY: Fair Products, Inc.

TO: Veronica Dutch, PM Team 25

Fungicide-Herbicide Branch/RD (7505C)

ax

FROM: Alfred Smith, Chemist

Product Chemistry Review Section

Registration Support Branch/RD (7505W)

08

THRU: Harold Podall, Section Head

Product Chemistry Review Section

Registration Support Branch/RD (7505W)

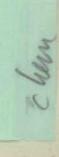
SUMMARY OF FINDINGS:

The Registrant has submitted product chemistry information in support of the reregistration of the chemical Maleic Hydrazide. The information satisfies the requirements of 40 CFR 158.155 - 158.190. No additional information is needed.

The Confidential Statement of Formula (CSF, EPA Form 8570-4, dated 01/03/91) meets the requirements of 40 CFR 158.155 and 158.175. The CSF is acceptable.

The Label meets the requirements of 40 CFR 156.10 with respect to the ingredient statement and the storage and disposal statements.

PCRS/RSB has no objections to the reregistration of the TGAI.



EP [] MP [] PRODUCT CHEMISTRY REVIEW

1.	DP BARCODE No.: D229218 2. REG./File Symbol No.: 51873-10
3.	Registration [] 4. Reregistration [x], Rereg Case No. 0381
5.	Product Name: Maleic Hydrazide 96% Technical Grade
6.	Pesticide Type: Fungicide [] Herbicide [x] Insecticide [] Rodenticide [] Antimicrobial [] Plant Growth Regulator [] Others:
7.	Uses: Food [] Non food use [x]
8.	Type of Submission: New [] Resubmission [] Amendment [] "ME-TOO" [] Alternate Formulation [] Repack [] Experimental Use Permit [] Other (Specify) 8-Month Response
9.	If "Me-TOO" Registration, this product is [] is not [] similar or substantially similar to EPA's Reg. No.:,
	If not, comment in Confidential Appendix A on the differences between the registered and the new source where significant.
CON	FIDENTIAL STATEMENT OF FORMULA, DATED 01/03 /1991 :
10.	Type of formulation and the sources of active ingredients:
	a. Non-integrated formulation system[x]
	b. Are all technical grade active ingredients used registered? • yes [x] • no []
	c. Integrated formulation system[]
11	Composition: The nominal concentrations (NC) of the active
	ingredients and the upper and lower certified limits (UCL & LCL) are as follows:
	% by weight
	Active ingredient(s) NC UCL LCL
	Maleic Hydrazide 96% 97% 95%

12.	The calculated NCs, based on the pure active ingredients (PAI), are identical to those on the label:
	• yes [x] • no []
13.	The certified limits are within the standard limits as per 40CFR§158.175 or are adequately explained if different:
	• yes [x] • no []
14.	Clearance of intentionally added ingredients in the formulation for the intended use:
	a. Formulation intended for food use under 40CFR§180.1001:
	• yes [] • no [] • Some are cleared, others are not []
	· Cleared under list: · c [] · d [] · e []
	b. Formulation intended for non-food use:
	• yes [x] • no [] • Some are cleared, others are not []
	· yes [x] · no [] · some are creared, others are not []
15.	For products produced by an integrated formulation system: • All impurities of toxicological significance have an UCL:
	• yes [] • no [] • not applicable []
	 All other impurities ≥ 0.1% associated with the active ingredient in the product are reported at their nominal concentrations:
	• yes [] • no [] • not applicable []
PROD	UCT LABEL, EPA RECEIVED 04/03 /1995:
16.	The active ingredients statement (chemical identities, nominal concentrations) is consistent with the CSF · yes [x] · no []
17.	The formulation contains one of the following: 10% or more of a petroleum distillate:

4

18. If yes to any of the above, does the inert ingredients statement contains a footnote indicating this?

• yes [] • no [] • not applicable []

19. The appropriate physical and chemical hazards statement regarding flammability or explosive characteristics of the product are given on the label:

yes []no []not applicable [x]

20. The storage and disposal instructions for the pesticide and container are in compliance with PR Notice 84-1 for household use products or PR Notice 83-3 for all other uses:

• yes [x] • no []

PRODUCT CHEMISTRY DATA (SERIES 61 and 62)

	nemical IDs/Manufacture/ nalytical Information	Data Required Fulfilled	MRID No.
61-1	Chemical Identity	Y	41233201
61-2	Starting Materials & Manufact or Formulation Process	Y	41233201
61-3	Discussion of Impurities	Y	41280701
62-1	Preliminary Analysis	Y	
62-2	Certified Limits	Y	41221801
62-3	Enforcement Analytical Method	Y	41185402

PRODUCT CHEMISTRY DATA (SERIES 63)

	ysical/Chemical roperties	Data Required Fulfilled	Value or Oualitative Description	MRID No.
63-3	Physical State	Y	Solid	42169201C
63-7	Density/Bulk Density	Y	37-45 lbs/cuft	н н
63-12	pH of Product	Y	2.7 - 3.4	CSF
63-15a	Flammability-Flash Point	Y	572 F (300 C)	42169201C
63-15b	Flame Extension	NA		
63-16	Explodability	NR	TENERAL BAR.	
63-17	Storage Stability	NR		
63-18	Viscosity	NR		
63-19	Miscibility (With Hydrocarbon solvents)	NR		
63-20	Corrosion Characteristics	NR		
63-21	Dielectric Breakdown Voltage	NR		

Explanations: Y = The Requirements Were Fulfilled; N = The Requirements Were Not Fulfilled;
NA = Not Applicable; G = Data Gap; U = Requires Upgrading; I = Incomplete or In Progress;

DP BARCODE: D229218

CASE: 044334 DATA PACKAGE RECORD SUBMISSION: S510607 BEAN SHEET

DATE: 08/27/96

Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REGISTRATION ACTION: 674 8 MNTH RESP-PROD SPC DATA

RANKING : 35 POINTS ()

CHEMICALS: 051501 Maleic hydrazide

96.0000%

ID#: 051873-00010 Maleic Hydrazide 96% Technical Grade

COMPANY: 051873 FAIR PRODUCTS INC

PRODUCT MANAGER: 25 ROBERT TAYLOR 703-305-6800 ROOM: CM2 241 PM TEAM REVIEWER: VERONICA DUTCH 703-308-8585 ROOM: CS1 1L4

RECEIVED DATE: 04/15/95 DUE OUT DATE: 10/12/95

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 229218 EXPEDITE: N DATE SENT: 08/27/96 DATE RET.: / /

CHEMICAL: 051501 Maleic hydrazide

DP TYPE: 001 Submission Related Data Package

CSF: Y LABEL: Y DATE OUT SSIGNED TO DATE IN ADMIN DUE DATE: 11/25/96 NEGOT DATE: / / DIV : RD 1 BRAN: RSB PROJ DATE: SECT: PCRS REVR : CONTR:

* * * DATA REVIEW INSTRUCTIONS * * *

Please review product chemistry for 8 month response for quidelines and MRIDs:

61-1, 2, 3, --- 41233201

61-3-----41280701

62-1-----41185402 & 41185403

62-2, 3-----41221801

62-3------41185402 &41185403

63-2,3,4,5,7,8--41233201

63-9,10,12,---41165401 63-13-----42056001

63-14------41185402

63-17-----42005601

63-20-----42005601

* * * DATA PACKAGE EVALUATION * * *

No evaluation is written for this data package

* * * ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION * * *

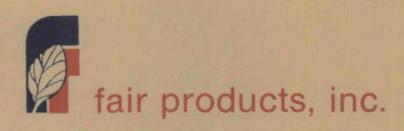
DP BC BRANCH/SECTION DATE OUT DUE BACK INS CSF LABEL

PRODUCT NAME Maleic Hydrazide 96% Technical Grade			REG. NO./FILE S	YMBOL		3. FORMULATOR'S EXEMPTION SELECTED: YES NOx			
5. APPLICANT'S (COMPANY) NAME AND ADDRESS: Fair Products, Inc. P.O. Box 386 Cary, NC 27511		MONTH	March 6, 1995 DAY YI	EGISTRATION DATE	7. ACTIVE INGREDIENT(S) Maleie Hydrazide				
8. DATA	REQUIREMENTS	9. SOURCE OF	DATA SATISFYI	NG REQUIREMENT	:-	.: ::			
8a. GUIDE- LINE NO. 158.150	8b. NAME OF TEST Product Chemistry	9a. SUBMITTED BY APPLICANT	9b. DATE SUBMIT- TED	9c. SUBMITTED BY ANOTHER PERSON/FIRM (GIVE NAME)	9d. PERMISSION (P) OR OFFER TO PAY (OTP)	9f. N.A. OR WAIVER	10. MRID NUMBER		
61-1	Identity & Composition	1	9-15-89				41233201		
61-2	Materials & Mfg. Process	1	9-15-89				41233201		
61-3	Discussion of Impurities	1	9-15-89			100,000	41233201		
61-3	Discussion of Impurities	1	11-17-89				41280701		
62-1	Preliminary Analysis	1	11-17-89				41280701		
62-1	Preliminary Analysis		7-31-89	MH Task Force	P	ALL	41185402		
62-1	Preliminary Analysis		7-31-89	MH Task Force	P		41185403		
62-2	Certification of Limits	1	9-7-89				41221801		
62-3	Enforcement Methods	1	9-7-89		The second		41221801		
62-3	Enforcement Methods		7-31-89	MH Task Force	P		41185402		
62-3	Enforcement Methods		7-31-89	MH Task Force	P		41185403		
63-2	Color	1	9-15-89				41233201		
63-3	Physical State	1	9-15-89				41233201		

PRODUCT NAME Maleic Hydrazide 96% Technical Grade			2. EPA R 51873-10	EG. NO./FILE S	YMBOL		3. FORMULATOR'S EXEMPTION SELECTED: YES NOx 7. ACTIVE INGREDIENT(S) Maleis Hydrazide		
ADDRESS Fair Produ P.O. Box S Cary, NC	. APPLICANT'S (COMPANY) NAME AND DDRESS: air Products, IncO. Box 386 ary, NC 27511			DAY Y	EGISTRATION DATE	Maleie Hydraz			
8a.	8b.	9a.	SKEE OF E	9b.	19c.	9d.	9f.	10.	_
GUIDE- LINE NO. 158.150	NAME OF TEST Product Chemistry	SUB	MITTED BY LICANT	DATE SUBMIT- TED	SUBMITTED BY ANOTHER PERSON/FIRM (GIVE NAME)	PERMISSION (P) OR OFFER TO PAY (OTP)	N.A. OR WAIVER	MRID NUMBER	
63-4	Odor		1	9-15-89		-		41233201	
63-5	Melting Point		1	9-15-89			THE SE	41233201	
63-6	Boiling Point						NA		
63-7	Density		1	9-15-89		7,000		41233201	
63-8	Solubility		1	9-15-89				41233201	
63-9	Vapor Pressure		1	4-17-89			Waiver	41165401	
63-10	Dissociation Constant		1	7-18-89				41165401	1
63-11	Octanol/Water Partition Coeff.		1	7-18-89				41165401	
63-12	рН		1	7-18-89		ES FREEZ		41165401	
63-13	Stability		1	9-9-91				42056001	1
63-14	Oxidizing/Reducing Action		1	5-11-90		MESTA		41185402	
63-15	Flammability		1	4-17-89			Waiver		-
63-16	Explodability		1	4-17-89			Waiver		

GENERIC DATA REQUIREMENT LISTING FOR THE SELECTIVE METHOD OF SUPPORT

PRODUCT NAME Maleic Hydrazide 96% Technical Grade			EG. NO./FILE SY	MBOL		3. FORMULATOR'S EXEMPTION SELECTED: YESNOx		
5. APPLICADDRESS Fair Produ P.O. Box 3 Cary, NC	acts, Inc. 386	The state of the s	arch 6, 1995	GISTRATION DATE	Maleie Hydraz	7. ACTIVE INGREDIENT(S) Maleie Hydrazide		
B. DATA	REQUIREMENTS	9. SOURCE OF D	ATA SATISFYIN	G REQUIREMENT	8.0		l l	
8a. GUIDE- LINE NO. 158.150	8b. NAME OF TEST Product Chemistry	A	9b. DATE SUBMIT- TED	9c. SUBMITTED BY ANOTHER PERSON/FIRM (GIVE NAME)	9d. PERMISSION (P) OR OFFER TO PAY (OTP)	9f. N.A. OR WAIVER	10. MRID NUMBER	
63-17	Storage Stability	1	9-9-91				42005601	
63-18	Viscosity					NA		
63-19	Miscibility			and the same of th		NA		
63-20	Corrosion Characteristics	V	9-9-91				42005601	
63-21	Dielectric Breakdown Voltage	No. of Contract of		7. No.	,	NA		
		-		100				



May 19, 1997 EPA Reg. No. 51873-10

Ms. Cynthia Giles-Parker Product Manager 22 U.S. Environmental Protection Agency Crystal Mall 2 (H7505-C) Jefferson Davis Highway Arlington, VA 22202

Subject:

Fair Products, Inc.'s submission of a copy of the Offer-To-Pay (OTP) letter set to Uniroyal Chemical on 5/9/97 to support registration of 51873-10, (MH 96% Technical Grade) submitted to EPA 1/20/89 but not granted until 8/13/91. We would like to request that this letter be included with the original Application for Registration of 1/20/89.

Ms. Giles-Parker:

Fair Products, Inc. is enclosing a copy of the OTP letter we recently sent to Uniroyal Chemical as the result of a dispute involving costs associated with the above registration. We have been unable to obtain a copy of the original OTP letter which we believe was sent to Uniroyal during 1989-90. Therefore, Fair Products, Inc. sent a new OTP letter to Uniroyal by certified mail on 5/9/97. As a means of further documentation with EPA, we are enclosing a copy for your reference (attached). We would like to have a copy of the letter included with the original submission jacket if possible.

We stress that, as the attached letter states, Fair Products, Inc. has never acted to avoid any legitimate costs of continuing MH registrations. The dispute with Uniroyal stems from the fact that they believe we have responsibility for cost sharing with three food studies. Specifically the studies are Guideline No.'s 83-2b Oncogenicity-Mouse, 83-3b Teratogenicity-Rabbit and 84-4 Reproduction-Rat. EPA has confirmed verbally and by MOU letter that these studies have no bearing on the exclusively Tobacco and Non-Crop products manufactured by Fair Products, Inc.

Ms. Cynthia Giles-Parker May 19, 1997 EPA Reg. No. 51873-10 Page - 2

On 5/5/97 we received a letter from Uniroyal stating that the registration of 51873-10 was not in compliance with FIFRA because they had not received a copy of any OTP letter in support of the registration. Although we believe the letter was sent, Fair Products, Inc. has not found a copy to date. However, we believe that it is clear that the intent of Fair Products, Inc. is and has always been to share any legitimate costs associated specifically with maintaining MH registrations with EPA. In fact, Fair Products, Inc. and Uniroyal had already agreed to share any costs and data required for MH registrations with the formation of Task Force I in 1986 almost two years before the MH Technical registration. As a founding member of Task Force II in 1989 it is again evident that Fair Products, Inc. has acted in good faith and intentions to share MH registration costs. We therefore believe that the original letter is less important when compared with the actions of Fair Products, Inc. in support of MH over the past 10 years.

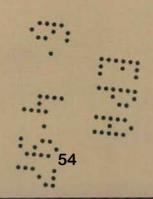
We appreciate your consideration of this situation and would like to restate our request that the original submission jacket be inspected to determine if a copy of the original OTP letter to Uniroyal was included in any correspondence to EPA regarding the 51873-10 registration.

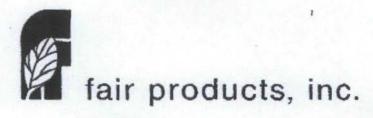
If we can be of any further assistance please contact us at (919) 467-8352, FAX (919) 467-9142.

Sincerely,

Thomas A. Tucker Product Manager Agri-Specialties Division Fair Products, Inc.

T.A.T./v.b.





David M. Cote'
Worldwide Business Director
Uniroyal Chemical Co., Inc.
Middlebury, CT 06749

May 9, 1997

Subject:

Response to your letter dated 5/5/97 but not received until 5/7/97.

Re-submission of Fair Products, Inc. Offer To Pay data compensation to support registration of 51873-10, MH 96% Technical.

Mr. Cote':

We have been unable to locate a copy of the original OTP letter which Fair Products, Inc. sent to Uniroyal in connection with the registration of the TGAI listed above. We believe that a copy of the original letter may have been included with the registration documentation sent EPA during 1989-1991, and are currently attempting to have EPA check their files for this copy. If we are able to locate a copy of the letter we will forward it to Uniroyal immediately upon receipt from EPA.

Since this is the case, Fair Products, Inc. is hereby resubmitting an Irrevocable Offer to Pay or Cost Share with Uniroyal for any data specifically applicable to the MH 96% TGAI registration submitted 1/20/89 but not granted until 8/13/91 pursuant with FIFRA 3(c)(1)(D) and 3(c)(2)(D). Fair Products Inc. also extends a General Offer to Pay Uniroyal compensation for specifically relevant data to the extent required by FIFRA 3(c)(1)(D) and 3(c)(2)(D)at this time.

In our judgment, the original letter is of little consequence since it is obvious that Fair Products, Inc. has never attempted to avoid the legitimate costs of maintaining MH registrations. As a member of both Task Force I and II beginning in 1986, Fair Products, Inc. and the other Task Force members had effectively and in good faith already agreed to share costs (and ownership) for any existing or new studies required to support continued registration of MH products with the US EPA. We do not dispute the fact that Fair Products, Inc. has committed to share legitimate data costs associated with continued MH registrations.

Furthermore, we agree that Uniroyal is due compensation for MRID No.'s 00146141 and 00147000 and would gladly enter into negotiations to determine an equitable compensation rate. However, after extensive conversations with EPA it is clear that the 3 large studies in question, MRID No.'s 00098466, 00128720, and 00128721 have absolutely no bearing on any of the products registered and produced by Fair Products, Inc.

We await your response to this letter and remain hopeful that this issue can be resolved to the satisfaction of all parties without resorting to legal arbitration as prescribed in EPA guidelines. We have sent a copy of this letter to EPA and to the office of Compliance Monitoring to be included in existing files.

Sincerely,

H. Frank Grainger

President

Agri-Specialties Division

Fair Products, Inc. USA

OPP Official File

Return to ISC (Crystal Mall #2, Rm. 234) by the latest date stamped below:

JUL 1 1 1993

JUL 1 7 1993

AUG 2 3 1993



51873-00010

PA REGISTRATION NO US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (75-767) TERM OF ISSUANCE WASHINGTON, DC 20460 NAME OF PESTICIDE PRODUCT REGISTRATION REREGISTRATION NOTICE OF PESTICIDE: Maleic Hydrazide 96% (Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended) NAME AND ADDRESS OF REGISTRANT (Include ZIP code) Pair Products, Inc. P.O. Box 386 Cary, NC 27511 NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number. On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act. A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith. Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that your 1. Submit/cite all data or other material required for registration/ reregistration of your product under FIFRA Section 3(c)(5) or FIFRA section 4 when the Agency requires all registrants of similar products to submit such data. 2. Make the labeling changes listed below before you you release the product for shipment: Add the phrase "EPA Registration No. 51873-10. a. b. Change the product name to "Maleic Hydrazide 96% Terchnical Grade", since your data supports this percent active ingredient. Change the ingredient statement to read:

> ACTIVE INGREDIENTS: MALEIC HYDRAZI

MALEIC HYDRAZIDE (1,2-Dihydro...) .. 96
INERT INGREDIENTS: 4

Γ	9	ATT	ACH	MEN	TIS	APPI	ICA	BLE
L					-		*	

SIGNATURE OF APPROVING OFFICIAL

DATE 13

EPA Form 8570-6 (Rev. 5-76)

PREVIOUS EDITION MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

Sincerely yours,

Robert J. Taylor Product Manager 25 Fungicide-Herbicide Branch Registration Division (H7505C)

Enclosure

. - 4 2 4

TECHNICAL GRADE

A HERBICIDE FOR FORMULATING

ACTIVE INGREDIENTS: MALEIC HYDRAZIDE, (1,2-Dihyd INERT INGREDIENTS:....

KEEP OUT OF REACH OF CHILDRE CAUTION

PRECAUTIONARY STATEMENTS

ACCEPTED

Under the Federal Insecticide.

registered under EPA Reg. No. 5/873-/0

Fungicide, and Rodenticide Act, as amended, for the pesticide

AUG 1 3 1991

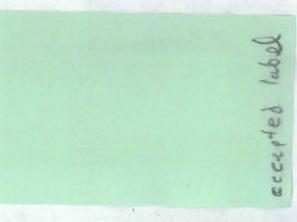
HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION. Harmful if swallowed [inhaled or absorbed through the skin]. Avoid breathing vapors [dust or spray mist]. Avoid contact with skin [eyes or clothing]. Avoid contact with skin, eyes or clothing. In case of contact immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists. Wear a long-sleeve shirt, long pants, and chemical resistant gloves at all times when mixing, loading, handling, or applying this chemical. STATEMENT OF PRACTICAL TREATMENT IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 galsses of water and induce vomiting by rouching back of throat with finger. Repeat until vomit fluid is clear. Do not induce vomiting or give anything by mouth to an unconscious person. IF SPLASHED IN EYES: Immediately flush eyes with plenty of

water and get medical attention. IF SPILLED ON SKIN: Immediately remove containinated clothing. INCLUDING SHOES, and wash skin with soap and plenty of water. If irritation develops, send for a physician. ENVIRONMENTAL HAZARDS

tion of bankin ships

This pesticide is toxic to fish and wildlife. Birds and other wildlife in treated areas may be killed. Do not apply directty to streams, lakes or ponds. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water unless this product is specifically identified and addressed in the NPDES permit. Do not discharge effluent containing this product into sewer systems without previously notifying the sewer treatment plant authority. For guidance

contact your State Water Board or Regional Office of the EPA.



DE 96%

(Upper Portion)

USE ONLY

ro-3,6-pyridazinedione...96% NET CONTENTS: 44 LBS.NET/BAG

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal Storage should be under lock and key and secure from access by unauthorized persons and children. Storage should be in a cool dry area away from any heat or ignition source. Do not stack over 2 pallets high. Move bags carefully so as not to tear or puncture. Do not move containers from one area to another unless they are securely sealed. Keep container tightly sealed when not in use. Do not allow material to become wet or store in a damp, humid area. Keep away from any puncture source. Avoid storage near water supplies, food, feed and fertilizer to avoid contamination. Store in original container only. If the contents are leaking or material is spilled follow these steps:

- 1. Collect and place in suitable containers for disposal.
- 2. Wash area with water and soap to remove remaining pesticide.
- 3. Follow washing with clean water rinse.
- 4. Do not allow run off to enter sewer or contaminate water supplies.
- Dispose of waste as indicated below.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesitcide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office

CONTAINER DISPOSAL: Fiber drums with liners-Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into applications equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner. Paper and plastic bags-Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PESTICIDES AND TOXIC SUBSTANCES

AUG 0 8 1991

MEMORANDUM:

Subject: Product Chemistry Review on

Maleic Hydrazide 95 % Technical.

EPA File Symbol: 51873-RN

From: Radamés Lozada, Chemist

Product Chemistry Review Section

Registration Support Branch Registration Division (H7505C)

To: Robert J. Taylor, PM 25

Fungicide-Herbicide Branch

Registration Division (H7505C)

Thru: Bipin Gandhi, Head

Product Chemistry Review Section

Registration Support Branch Registration Division (H7505C)

Requestor: Fair Products, Inc.

EPA File Symbol: 51873-RN

EPA MRID No.: none

Pesticide Chemical Code: 051501

Company Code No.: MH

Chemical Name: 1,2-dihydro-3,6-pyridazinedione

Common/Trade Name: Maleic Hydrazide

Use: Herbicide

Introduction:

This submission (from Fair Products, Inc. dated January 9, 1991.) is for Maleic Hydrazide 95 % Technical which contains the active ingredient 1,2-dihydro-3,6-pyridazinedione. All product chemistry data requirements pertaining to the TGAI as described in 40 CFR Subpart C § 158.150 - 158.190 must be satisfied to achieve full registration. The product chemistry data for Maleic Hydrazide 95 % Technical was previously reviewed by Alfred Smith of Product Chemistry Review Section, Registration Support Branch, Registration Division on November 30, 1990. The following deficiency was found:

 A revised CSF is required and should include the upper and lower limits for the active ingredient and upper limits for each impurity.

The registrant has submitted a new CSF for Maleic Hydrazide 95 % Technical. Refer to Confidential Appendix A for a disclosure of these limits. The submitted CSF is acceptable, but for future reference the registrant must be aware that impurities present in the pesticide product at level lower than 0.01 % do not need to be listed on the CSF unless there is an impurity of toxicological concern. No additional data is needed for this topic.

Conclusions and Recommendations

Although the product chemistry data requirements for Maleic Hydrazide 95% Technical have been completely satisfied; the registrant should be aware that according to the submitted Preliminary Analysis and CSF, it appeared that Maleic Hydrazide 95% Technical would support a label claim of 96%. The label claim of the active ingredient in the final printing of the label should be 96% in order to comply with PR Notice 91-2.

Attachment:

Confidential Appendix A

51873-10

Maleic Hydrazide 96% Technical Grade

Fair Products, Inc. P.O. Box 386 Cary, NC 27511

51873-10

Maleic Hydrazide 96% Technical Grade

Fair Products, Inc. P.O. Box 386 Cary, NC 27511

TDE 96% MALEIC HYDA.

(Upper Portion)

TECHNICAL GRADE

A HERBICIDE FOR FORMULATING USE ONLY

ACTIVE INGREDIENTS: MALEIC HYDRAZIDE, (1,2-Dihydro-3,6-pyridazinedione...96% INERT INGREDIENTS: 44 LBS.NET/BAG

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAITTONARY STATEMENTS

STORAGE AND DISPOSAL

HAZARDS TO HIMANS AND DOMESTIC ANIMALS CAUTION. Harmful if swallowed [inhaled or absorbed through the skin]. Avoid breathing vapors [dust or spray mist]. Avoid contact with skin [eyes or clothing]. Avoid contact with skin, eyes or clothing. In case of contact immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists. Wear a long-sleeve shirt, long pants, and chemical resistant gloves at all times when mixing. loading, handling, or applying this chemical. STATEMENT OF PRACTICAL TREATMENT IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 galsses of water and induce vomiting by rouching back of throat with finger. Repeat until vomit fluid is clear. Do not induce vomiting or give anything by mouth to an unconscious person. IF SPLASHED IN EYES: Immediately flush eyes with plenty of water and get medical attention.

IF SPILLED ON SKIN: Immediately remove containinated clothing. INCLUDING SHOES, and wash skin with soap and plenty of water. If irritation develops, send for a physician.

ENVIRONMENTAL HAZARDS This pesticide is toxic to fish and wildlife. Birds and other wildlife in treated areas may be killed. Do not apply directly to streams, lakes or ponds. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water unless this product is specifically identified and addressed in the NPDES permit. Do not discharge effluent containing this product into sewer systems without previously Otifying the sewer treatment plant authority. For guidance Antact your State Water Board or Regional Office of the EPA.

Do not contaminate water, food or feed by storage or disposal Storage should be under lock and key and secure from access by unauthorized persons and children. Storage should be in a cool dry area away from any heat or ignition source. Do not stack over 2 pallets high. Move bags carefully so as not to tear or puncture. Do not move containers from one area to another unless they are securely sealed. Keep container tightly sealed when not in use. Do not allow material to become wet or store in a damp, humid area. Keep away from any puncture source. Avoid storage near water supplies, food, feed and fertilizer to avoid contamination. Store in original container only. If the contents are leaking or material is spilled follow these steps:

1. Collect and place in suitable containers for disposal.

2. Wash area with water and soap to remove remaining pesticide.

3. Follow washing with clean water rinse.

4. Do not allow run off to enter sewer or contaminate water supplies.

5. Dispose of waste as indicated below.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesitcide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for quidance.

CONTAINER DISPOSAL: Fiber drums with liners-Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into applications equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner. Paper and plastic bags-Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Front Panel (Lower Portion)

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

DIRECTIONS FOR USE:

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

No end use for this product other than manufacturing is intended or implied by this label.

Formulators using this product are responsible for obtaining EPA registration of their formulated products.

FAIR PRODUCTS EPA REGISTRATION NO. 51873-?

EPA ESTABLISHMENT NO. 45671-NC-01

Manufactured For:

FAIR PRODUCTS, INC.

Post Office Box 386 Cary, North Carolina 27512 WARRANTY CONDITION OF SALE:

Fair Products warrant that this product conforms to its chemical description and is reasonably fit for the purposes referred to in the directions for use. Fair Products makes no other warranties, express or implied, including FITNESS or MERCHANGABILITY. In no case shall Fair Products or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. The foregoing is a condition of sale by Fair Products, Inc. and is accepted as such by the Buyer.

NOTE: Actual label will conform to type and point sizes outlined in Pesticide Labeling Requirements. 40 CFR 156.10

A HERBICIDE FOR FORMULATING USE ONLY

ACTIVE INGREDIENTS:

MALEIC HYDRAZIDE, (1,2-Dihydro-3,6-pyridazinedione...96%

INERT INGREDIENTS: 44 LBS.NET/BAG

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION. Harmful if swallowed [inhaled or absorbed through the skin]. Avoid breathing vapors [dust or spray mist]. Avoid contact with skin [eyes or clothing]. Avoid contact with skin, eyes or clothing. In case of contact immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists. Wear a long-sleeve shirt, long pants, and chemical resistant gloves at all times when mixing, loading, handling, or applying this chemical. STATEMENT OF PRACTICAL TREATMENT IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 galsses of water and induce vomiting by rouching back of throat with finger. Repeat until vamit fluid is clear. Do not induce vamiting or give anything by mouth to an unconscious person. IF SPLASHED IN EYES: Immediately flush eyes with plenty of water and get medical attention.

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STORAGE AND DISPOSAL

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Front Panel (Lower Portion)

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

DIRECTIONS FOR USE:

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

No end use for this product other than manufacturing is intended or implied by this label.

Formulators using this product are responsible for obtaining EPA registration of their formulated products.

FAIR PRODUCTS EPA REGISTRATION NO. 51873-?

EPA ESTABLISHMENT NO. 45671-NC-01

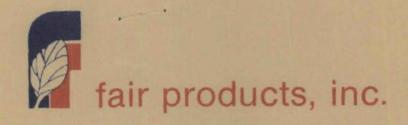
Manufactured For:

FAIR PRODUCTS, INC.

Post Office Box 386 Cary, North Carolina 27512 WARRANTY CONDITION OF SALE:

Fair Products warrant that this product conforms to its chemical description and is reasonably fit for the purposes referred to in the directions for use. Fair Products makes no other warranties, express or implied, including FITNESS or MERCHANGABILITY. In no case shall Fair Products or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. The foregoing is a condition of sale by Fair Products, Inc. and is accepted as such by the Buyer.

NOTE: Actual label will conform to type and point sizes outlined in Pesticide Labeling Requirements. 40 CFR 156.10



April 15, 1991

Mr. Robert J. Taylor Product Manager 25 Fungicide-Herbicide Branch U.S. EPA Registration Division (H7505C)

Dear Mr. Taylor:

Subject: Maleic Hydrazide 95% Technical Grade

EPA ID No. 51873-RN

Re: Revised Confidential Statement of Formula

submitted January 3, 1991

Letters dated January 3, February 14, and March 6, 1991

Phone Conversations of February 28, March 6, and

April 1, 1991

We are writing in regards to your letter of December 18th 1990. In that letter you indicated that the version of our CSF for the product Maleic Hydrazide 95% Technical Grade, (EPA No. 51873-RN), submitted on October 22, 1990 was not acceptable. This CSF is apparently the only submittal remaining in the way of successful registration of the above product, as indicated by your letters of April 9 and December 18, 1990. Therefore on January 3, 1991 after contacting Mr. Radamas Lozada in your Technical Review Section for clarification, we submitted a revised CSF which should have met EPA criteria.

At the present date we have not received any correspondence from EPA regarding this submittal. We have however made numerous attempts to determine the status of the registration through phone calls and letters. In a recent phone conversation on March 6, 1991 you indicated that the CSF had been received and that we should receive notification within 7 days. In a subsequent phone conversation on April 1, 1991 you indicated that you would check the status of the submittal to expedite it and commented that there was no acceptable reason for the delay we are experiencing. We were again advised to wait 7 days for notification which we have yet to receive.

continued:

Robert J. Taylor EPA

Since there appears to be a problem with communication somewhere within the agency, we are re-submitting the revised CSF originally sent to EPA on January 3, 1991 along with copies of correspondence regarding the submittal for your convenience.

Please note that we submitted copies of revised labeling to conform with requests by EPA on October 22, 1990 and have also not received notification regarding these changes. Since we have not received correspondence on the labeling, we will assume the revised labeling submitted in October is acceptable to EPA. If this is not the case please notify us. Otherwise, we will assume the labeling is accepted by EPA.

We would greatly appreciate expedient consideration of our submittal and timely notification by the agency regarding this matter.

If We can be of any further assistance in this matter please contact us at (919)-467-1599.

Sincerely,

Thomas A. Tucker

Product Registration Manager Agri-Specialties Division

Fair Products, Inc.



fair products, inc.

January 3, 1991

Mr. Robert J. Taylor Product Manager 25 Fungicide-Herbicide Branch U.S. EPA Registration Division (H7505C)

Dear Mr. Taylor:

I am writing in regards to your letter of December 18th 1990. In that letter you indicated that the most recent version of our CSF for the product Maleic Hydrazide 95% Technical Grade, (EPA No. 51873-RN) submitted on October 22, 1990 was still not acceptable. I have contacted Radamas Lozada in the Technical Review Section for clarification on the CSF and now believe the enclosed CSF to acceptable to EPA.

Please note that I sent three copies of our revised label in the October 22 packet as per your request. Since we have not heard anything back from EPA regarding the new label we assume it is acceptable and will not require additional changes. If this is not the case please advise us. Otherwise we will assume the new label has been accepted.

We believe the enclosed CSF should complete the registration requirements for the afore mentioned "me too" technical A.I. material and hope to draw these registration proceedings to a close.

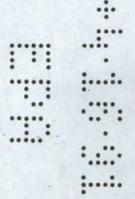
If I can be of any further assistance please contact me at 919-467-1599.

Sincerely

Thomas A. Tucker

Product Registration Manager Agri-Specialties Division

Fair Products, Inc.



Fair Products, Inc. Agri-Specialties Division Post Office Box 386, Cary, North Carolina 27512-0386

Telephone: (919) 467-8352 Telex: 5106002142

FAX: 919-467-9142

DP BARCODE: D161372

CASE: 044334 DATA PACKAGE RECORD DATE: 02/14/91 SUBMISSION: S390736 BEAN SHEET Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REGISTRATION ACTION: 161 RESUBMISSION

CHEMICAL:

ID#: 051873-RN Maleic Hydrazide 95% Technical Grade

COMPANY: 051873 FAIR PRODUCTS INC.

PRODUCT MANAGER: 25 ROBERT TAYLOR
PM TEAM REVIEWER: LEONARD COLE 703-557-8542 ROOM: CM-2 245
703-557-8542 ROOM: CM#2 233

RECEIVED DATE: 01/09/91 DUE OUT DATE: 04/09/91

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 161372 EXPEDITE: N DATE SENT: 02/14/91 DATE RET.: / /

DP TYPE: 001 Submission Related Data Package

OMIN DUE DATE: 03/31/91 CSF: Y ASSIGNED TO DATE IN DATE OUT LABEL: Y

111 DIV: RD BRAN: RSB SECT: PCRS // REVR : ASMITH CONTR:

* * * DATA PACKAGE REVIEW INSTRUCTIONS * * *

PLEASE REVIEW ACCOMPANYING CONFIDENTIAL STATEMENT OF FORMULA FOR REGISTRATION OF THE ABOVE MENTIONED PRODUCT. REGISTRANT HAS REVISED CSF BY INCLUDING ALL OF THE INFORMATION THAT YOU REQUESTED. MANY THANKS...

* * * ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION * * *

DP BC BRANCH/SECTION DATE OUT DUE BACK INS CSF LABEL



fair products, inc.-

February 14, 1991

Mr. Robert J. Taylor Product Manager 25 Fungicide-Herbicide Branch U.S. EPA Registration Division (H7505C)

Subject: Fair Products, Inc. request for label amendments for the product Fair 85, EPA No. 51873-7.

Dear Mr. Taylor:

Fair Products would like to request additional application instructions on the label of our Fair 85 product. The additional instructions would read as follows and are the result of research being conducted in N.C. by North Carolina State University:

"In the event of an extended season and to avoid excessive MH residues, a late season application of 2.5 gallons Fair 85 may be made 3 to 4 weeks after MH application".

These instructions would be placed under the "How much Fair 85 to apply" heading of use instructions as shown on the enclosed labels. Although this request constitutes a new additional application time for Fair 85 on tobacco, we do not believe that a scientific review is necessary since as a contact, fatty alcohol sucker control, Fair 85 produces no residue in or on treated tobacco. Residue studies have consistently indicated that the alcohol level of tobacco treated with fatty alcohols (2.6 to 4.8 ppm) is not significantly different from that of untreated tobacco. In fact tobacco naturally produces about 7000 ppm fatty alcohols, a level which is not significantly increased by multiple fatty alcohol sucker control applications (see Attachment A).

Enclosed you will find an Application for Pesticide Amendment form 8570-1 and five copies of the proposed label with the change highlighted.

We would appreciate expedient consideration of our request and a prompt reply since we are in the process of ordering labels for the upcoming season.

Fair Products, Inc. Agri-Specialties Division Post Office Box 386, Cary, North Carolina 27512-0386

Telephone: (919) 467-8352 Telex: 5106002142

FAX: 919-467-9142

Robert J. Taylor EPA

In addition, I would like to enquire about the status of our application for a Technical MH label, 51873-RN. Our most recent submittal of a revised CSF on January 3, 1991 should have completed the registration requirements, so that our registration efforts can be brought to a close.

Thank you for kind consideration of these requests. If I can be of any further assistance please contact me at 919-467-1599.

Sincerely,

Thomas A. Tucker

Product Registration Manager Agri-Specialties Division

Fair Products, Inc.



fair products, inc.

March 6, 1991

Mr. Robert J. Taylor Product Manager 25 Fungicide-Herbicide Branch U.S. EPA Registration Division (H7505C)

Dear Mr. Taylor:

Fair Products would like notify EPA that the following products will be sold in the sizes of containers indicated in the future.

Fair 85TM (EPA No. 51873-7):
2 Gallon Plastic Jugs
2 Gallon Plastic Membranes
5 Gallon Open Head Plastic Pails
up to 110 Gallon Bulk Containers

Fair Plus (EPA No. 51873-2):
2 Gallon Plastic Jugs
2 Gallon Plastic Membranes
5 Gallon Open Head Plastic Pails
up to 110 Gallon Bulk Containers

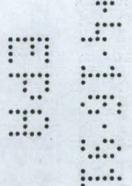
Fair 30TM (EPA No. 51873-9) once called Fair-2: 2 Gallon Plastic Jugs 2 Gallon Plastic Membranes 5 Gallon Open Head Plastic Pails up to 110 Gallon Bulk Containers

FST-7TM (EPA No. 51873-6):
3 Gallon Plastic Jugs
3 Gallon Plastic Membranes

Fair-TacTM (EPA No. 51873-5):
2 Gallon Plastic Jugs
2 Gallon Plastic Membranes
5 Gallon Open Head Plastic Pails
up to 110 Gallon Bulk Containers

De-Cut (EPA No. 51873-8):

2 Gallon Plastic Jugs
2 Gallon Plastic Membranes
5 Gallon Open Head Plastic Pails
up to 110 Gallon Bulk Containers



Robert J. Taylor EPA

Please note that all containers will be labeled as per EPA guidelines and shall conform to applicable DOT standards.

We would also like inquire as to the status of our Maleic Hydrazide 95% Technical Grade (EPA No. 51873-RN) registration. We submitted the revised CSF in October and have inquired on numerous occasions since then. In our phone conversation of March 6, 1991 you indicated that we would be advised in the next 7 days of the registration's status.

If I can be of any further assistance please contact me at 919-467-1599.

Sincerely,

Thomas A. Tucker

Product Registration Manager Agri-Special lies Division

Fair Products, Inc.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PESTICIDES AND TOXIC SUBSTANCES

Thomas A. Tucker Fair Products, Inc. P.O. Box 386 806 Reedy Creek Road Cary, NC 27512

AFR - 9

Dear Mr. Tucker:

Subject: Maleic Hydrazide 95% Technical Grade

EPA Registration No. 51873-RN Re: Product Chemistry Review

The scientific review and evaluation of the subject product have been completed. Please see our comments and conclusions.

PRODUCT CHEMISTRY

Comments:

- No additional information on the product identity and composition is required.
- 2. The submitted Confidential Statement of Formula (CSF) form is still not acceptable. You have submitted a CSF which includes the limits for each in the manufacturing process. Please submit a revised CSF which includes the upper and lower limits for the active ingredient and upper limits for each impurity (CSF form enclosed).
- 3. No additional information on the physical and chemical characteristics is required.

LABELING

Comments:

1. The Storage and Disposal Block must be placed under the Directions to Use section, immediately after the misuse statement.

CONCLUSIONS

- A revised CSF is required.
- Revise your label to include the above label change.

11 1 4

Sincerely,

Robert J. Taylor

Product Manager (25)

Fungicide-Herbicide Branch Registration Division (H7505C)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PESTICIDES AND TOXIC SUBSTANCES

Thomas A. Tucker Fair Products, Inc. P.O. Box 386 Cary, North Carolina 27511

DEC 1 8 1990

Dear Mr. Tucker:

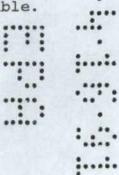
Subject: Maleic Hydrazide 95% Technical Grade

EPA Identifying No. 51873-RN

Re: Revised Confidential Statement of Formula Your letters dated May 24 and October 22, 1990

The review of your Confidential Statement of Formula (CSF) has been completed. Based on our review we have reached the following conclusions:

- 1. The revised Confidential Statement of Formula (CSF) in your letter of 5/24/90 does not contain the information required under 40 CFR 158.175, and is, therefore, not adequate. The CSF should contain an upper and lower limit, as well as a nominal level, for each active ingredient and each inert ingredient in the product. The CSF should also contain an upper limit for impurities present at levels of greater than or equal to 0.1% in the product. A revised CSF is needed which incorporates the Above requirements. A collection of terms is defined under .40 CFR 152.3 which can assist in the preparation of the CSF.
- Your revised Confidential Statement of Formula (CSF) as of 10/22/90 is still not acceptable.



Inert ingredient information may be entitled to confidential treatment

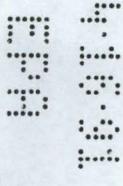
You have submitted a CSF which includes the limits for each in the manufacturing process. Please submit a revised CSF which includes the upper and lower limits for the active ingredient and upper limits for each impurity.

Sincerely,

Product Manager (25)

Fungicide-Herbicide Branch

Registration Division (H7505C)



DEC 1 8 1990

Thomas A. Tucker
Fair Products, Inc.
P.O. Box 386
Cary, North Carolina 27511

Dear Mr. Tucker:

Subject: Maleic Hydrazide 95% Technical Grade

EPA Identifying No. 51873-RN

Re: Revised Confidential Statement of Formula Your letters dated May 24 and October 22, 1990

The review of your Confidential Statement of Formula (CSF) has been completed. Based on our review we have reached the following conclusions:

- 1. The revised Confidential Statement of Formula (CSF) in your letter of 5/24/90 does not contain the information required under 40 CFR 158.175, and is, therefore, not adequate. The CSF should contain an upper and lower limit, as well as a nominal level, for each active ingredient and each inert ingredient in the product. The CSF should also contain an upper limit for impurities present at levels of greater than or equal to 0.1% in the product. A revised CSF is needed which incorporates the Above requirements. A collection of terms is defined under .40 CFR 152.3 which can assist in the preparation of the CSF.
- Your revised Confidential Statement of Formula (CSF) as of 10/22/90 is still not acceptable.

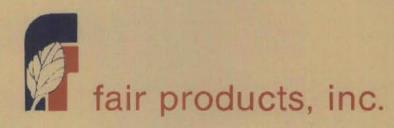
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SYMBOL # 47505C									
SURNAME) COLE									
DATE 12/14/90									
EPA Form 1320-1 (12-70)	*U.S.GPO:1989-624-485/10186	OFFICIAIS DILE COPY							

Inert ingredient information may be entitled to confidential treatment

You have submitted a CSF which includes the limits for each in the manufacturing process. Please submit a revised CSF which includes the upper and lower limits for the active ingredient and upper limits for each impurity.

Sincerely,

Robert J. Taylor Product Manager (25) Fungicide-Herbicide Branch Registration Division (H7505C)



May 24, 1990

Registration Division (TS-767C) U.S. EPA CM #2, 1921 Jefferson Davis Highway Arlington, Virginia 22202

Attention: Mr. Robert Taylor Product Manager 25

Subject: Fair Products response to the request for a revised Confidential Statement of Formula to be included with our application for registration for the product Maleic Hydrazide 95% Technical Grade, EPA No. 51873-RN.

Mr. Taylor:

Enclosed is a revised Confidential Statement of Formula (CSF) to be included with our application for registration of Maleic Hydrazide 95% Technical Grade, EPA No. 51873-RN, as per your request of April 9, 1990.

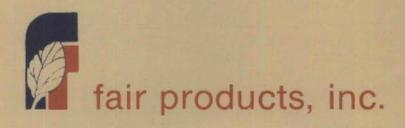
Please note that although are not present in amounts above 0.1% they have been included on the CSF as per your instructions. We hope that the revised CSF is acceptable.

Regarding the changes in labeling outlined in your April 9, 1990 letter, Fair Products will make the requested changes and send a copy of the new label to you for approval before any product is released for sale.

If we can be of any further assistance in this matter please.

Singerely,

Thomas A. Tucker Product Registration Manager



October 22, 1990

Mr. Robert J. Taylor Product Manager (25) Fungicide-Herbicide Branch U.S. EPA Registration Division (H7505C)

Dear Mr. Taylor:

I am writing in regards to your letter of April 9th, 1990. In that letter you indicated that our request for registration of the product: Maleic Hydrazide 95% Technical Grade, EPA No. 51873-RN had cleared the scientific review and no more data on physical and chemical properties was required.

The letter also requested a CSF which includes upper and lower limits for A.I.s and impurities and an updated label. The revised CSF was submitted to EPA on May 24, 1990. I have included a copy of the revised CSF along with 3 copies of revised labeling as per your letter of April 9th for your review at this time.

We hope that these data will fulfill EPA's requirements for registration of Maleic Hydrazide 95% as a "me too" technical A.I. and allow for a completion of these registration proceedings.

If I can be of any further assistance please contact me at 919-467-1599.

Sincerely,

Thomas A. Tucker

Product Registration Manager Agri-Specialties Division Fair Products, Inc. FROM: Alfred Smith, Chemistry
Registration Division (H7505C) To: Cynthia Giles-Parker, PM Jean 25
Fungicides-Herbicides Branch
Registration Division (H7505C)

THEU: Donald R. Stubbs, acting
Chief, PCRS/RSB/RD (H7505C) Kegistrant: Fair Froducts, Inc. EPA I.D. Mo: 51873-RN MRID no: none Pesticide Chemical Code: 05/50/ CAS Mo: 123-33-1 Chemical Name: 1,2-Dihydro-3,6-pyridazinedione Common Name: Maleic Hydrazide Use: Herbicide

Introduction
The registrant has submitted (letter of 5/24/90, Thomas
a. Jucker) a revised Confidential Statement of Formula (CSF,
EPA Form 8570-4). This submission is in response to
The PCRS/R5B review of 3/12/90
(Radames Lozada) and the
Product Managers letter of 4/9/90
(Robert J. Julian, PM 25) in which
the registrant was informed
that a revised CSF was needed.
The conclusion and comment

"The submitted Confidential Statement of Formula (CSF); is still not acceptable. You have submitted a CSF which includes the limits for each in the manufacturing process. Please submite a revise sed CSF which includes the upper and lower limits for the active ingredient and upper limits for each impurity (MSF form enclosed)."

The revised CSF in the registrant's letter of 5/24/90 does not contain the information required under 40 CFR 158.175, and is, therefore, not adequate. The CSF should contain an upper and lower limit, as well as a nominal level, for each active ingredient and each inert ingredient in the product.

Also, the CSF should contain an upper limit for impurities present at levels of greater than or equal to of percent in the product a revised CSF is helded which incorporates the above requirements. a collection of terms are defined under 40 CFR 152.3 which can assist in the preparation of the CSF.

0

SUBJECT: Product Chemistry Review of Maleic Hydroside 95% Technical (EPA no. 51873-RN) FROM: Getred Smith, Chemist Freduct Chemistry Review Section Registration Support Branch Registration Division (H7505C) TO: Cynthia Giles-Parker, PM Jean 25
Fungicides-Herbicides Branch
Registration Division (H7505C)

THEU: Donald R. Stubbs, acting
Chief, PCRS/RSB/RD (H7505C) Kegistrant: Fair Froducts, Inc. EPA I.D. Mo: 51873-RN MRID no: none Pesticide Chemical Code: 051501 CAS 70: 123-33-1 Chemical Name: 1,2-Dihydro-3,6-pyridazinedione Common Name: Maleic Hydrazide Use: Herbicide

Introduction
The registrant has submitted (letter of 5/24/90, Thomas
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Product Manager's letter of 4/9/90
(Robert J. Julian, PM 25) in which
the registrant was informed
that a revised CSF was needed.
The conclusion and comment

"The submitted Confidential Statement of Formula (CSF) is still not acceptable. You have submitted a CSF which includes the limits for each process. Please submit a revise sed CSF which includes the upper and lower limits for the active ingredient and upper limits for each impurity (RSF form enclosed)."

The revised CSF in the registrant's letter of 5/24/90 does not contain the information required under 40 CFR 158.175, and is, therefore, not adequate. The CSF should contain an upper and lower limit, as well as a nominal level, for each active ingredient and each inert ingredient in the product.

nert ingredient information may be entitled to confidential treatment*

Also, the CSF should contain an upper limit for impurities present at levels of greater than or equal to 0.1 percent in the product. A revised CSF is helded which incorporates the above requirements. The above requirements terms are defined under 40 CFR 152.3 which can assist in the preparation of the CSF.

SUBJECT: Results of the Method Trials for the active Ingredient: Maleic Hydrazide FROM: Alfred Smith, Chemist, Broduct Chemistry Review Section Registration Support Branch Registration Division (H7505C) TO: PM Jean No. 25 Registration Division (H7505C) THRU: Lynn M. Bradley, Chief PERS/RSB/RD (H7505C) The analytical Chemistry Section (ACB/BEAD) has performed method trials for the determimation of the lactive ingredient (ai)
maleic hydragide
the products: maleic hydragide
technical
Enclosed is a copy of the
results of the method trials.
PCRS/RSB concludes that
the analytical method is
adequate for the ditermination of the a.i. in the products



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460 Analytical Chemistry Section Building 306, BARC-East Beltsville, Maryland 20705

JAN 12 1990

OFFICE OF PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Analytical Procedure for the Determination of certified limits

for MALEIC HYDRAZIDE in a Technical Sample, (Maleic Hydrazide,

M H), 1,2-dihydro-3,6-pryridazinedione.

Registrant: Fair Products, Inc.

EPA Reg. Nos. 51873-RN ACS No. 1989-AI-08

Gregory P. Verdin, Physical Science Technician Adrian W. Burns, Chemist Auds full FROM:

Analytical Chemistry Section

Dallas Wright, Jr., Acting Head DOW THRU:

Analytical Chemistry Section

THRU: Donald A. Marlow, Chief

Analytical Chemistry Branch

DM

TO: Lynn Bradley, Head

Product Chemistry Review Section Registration Support Branch Registration Division (H7505C)

As per §62-3 of the Pesticide Assessment Guidelines, Subdivision D Product Chemistry Section, concerning verification of certified limits for MUPs, and §64-1 regarding submittal samples for analysis, the registrant has submitted the following materials to the Analytical Chemistry Section (ACS) labeled with purity as follows:

- 1 Maleic Hydrazide (standard) Net 5g Labeled 99.9% no Lot number (Otsuka Chemical Co., Ltd.)
- 2 Maleic Hydrazide Lot 6 Net 200g No Label Claim* (Otsuka Chemical Co., Ltd.) * Accompanying data sheet indicates 97.5%
- 3 Hydrazine dihydrochloride Net 5g Labeled 99.9% no Lot number (Otsuka Chemical Co., Ltd.)

The assumption was made that sample #2 above is technical maleic hydrazide and was assayed by a reverse phase HPLC in-house method. The method employes external standard quantitation. No variations were made from the method. No precision or statistical data is available for the method.

A Waters™ liquid chromatograph equiped with a Schoefel 770 variable wavelength detector and a 25 cm x 4.6 mm u-Bondak™ C-18 column was used for the analysis. All data acquision was made by electronic intergration.

The following HPLC conditions were also utilized to effect optimum sepraration

UV Detector Wavelength - 280 nm

Detector Sensitivity - adjusted to 0.01 aufs

Flow Rate - 1.0 ml/min-Temperature - ambient

Mobile Phase - 1% acetic acid:acetonitrile(90:10)

(as per method format)

A linearity study was conducted for the analytical standard maleic hydrazide which proved to be linear over the concentration range specified in the method.

The sample of Maleic Hydrazide submitted was assayed in triplicate yielding the following results:

Material	Assa	y Value	s (%)	Average (%)	SD/RSD	
MH Technical	99.48,	98.95,	103.17	100.44	2.3/2.29	

The standard deviation for the assay values found for the maleic hydrazide technical are within the limits of Subdivision D of the Product Chemistry Assessment Guidelines and appears to be within the material's certified limits.

Two copies of this memo are enclosed so that one may be initialed, dated, and returned. When the memo is returned it will enable ACS to dispose of the subject standards and samples in an appropriate and safe manner.

Should you have any questions concerning the above analysis please advise the author at 344-2833.

APR - 9 1990

Thomas A. Tucker Fair Products, Inc. P.O. Box 386 806 Reedy Creek Road Cary, NC 27512

Dear Mr. Tucker:

Subject: Maleic Hydrazide 95% Technical Grade

EPA Registration No. 51873-RN Re: Product Chemistry Review

The scientific review and evaluation of the subject product have been completed. Please see our comments and conclusions.

PRODUCT CHEMISTRY

Comments:

- 1. No additional information on the product identity and composition is required.
- 2. The submitted Confidential Statement of Formula (CSF) form is still not acceptable. You have submitted a CSF which includes the limits for each in the manufacturing process. Please submit a revised CSF which includes the upper and lower limits for the active ingredient and upper limits for each impurity (CSF form enclosed).
- No additional information on the physical and chemical characteristics is required.

LABELING

Comments:

 The Storage and Disposal Block must be placed under the Directions for Use section, immediately after the misuse statement.

CONCURRENCES								
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SURNAME)	H7505 C.						100	The state of the s
DATE)	4/4/90							
EPA Form	1320-1 (12-70)		4441179			THE PARTY.	OFFIC	IAL 94LE COP

*0.8, GPO : 1986-159-319



- 1. A revised CSF is required.
- 2. Revise your label to include the above label change.

Sincerely,

Robert J. Taylor Product Manager (25) Fungicide-Herbicide Branch Registration Division (H7505C)

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

MAR 1 2 1990

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM:

Subject: Product Chemistry Review on

Maleic Hydrazide 95 % Technical.

EPA File Symbol: 51873-RN

From: Radamés Lozada, Chemist

Product Chemistry Review Section Registration Support Branch Registration Division (H7505C)

To: Robert J. Taylor, PM 25

Fungicide-Herbicide Branch Registration Division (H7505C)

Thru: Lynn M. Bradley, Head

Product Chemistry Review Section

Registration Support Branch Registration Division (H7505C)

Requestor: Fair Products, Inc.

EPA File Symbol: 51873-RN

EPA MRID No.: 412296-01, 02, 03

Pesticide Chemical Code: 051501

Company Code No .: MH

Chemical Name: 1,2-dihydro-3,6-pyridazinedione

Common/Trade Name: Maleic Hydrazide

Use: Herbicide

Introduction:

This submission (from Fair Products, Inc. dated September 11, 1989.) is for Maleic Hydrazide 95 % Technical which contains the active ingredient 1,2-dihydro-3,6-pyridazinedione. All product chemistry data requirements pertaining to the TGAI as described in 40 CFR 158.120 must be satisfied to achieve full registration. The product chemistry data for Maleic Hydrazide 95 % Technical was previously reviewed by Connie B. Welch of Product Chemistry Review Section, Registration Support Branch, Registration Division on March 22, 1989. The following deficiencies were found:

- 1. § 61-2: Copies of the technical specifications, data sheets describing the composition, properties, and toxicity of each beginning material. Statement of whether the process is a batch or continuous process. Description of equipment used to produce the product. Brief description of any physical conditions which are controlled during each step of the process. Flow chart with chemical equations of each intended chemical reaction occurring at each step. Duration of each step of the process. Description of any purification or quality control procedures for the final product.
- 2. § 62-1: Statement clarifying sampling procedure used. If the samples were not taken from five different batches then the data are insufficient and the analysis will have to be resubmitted. Test results for the impurity or another test method with quantitative results. All impurities present at levels 0.1 % w/w must be identified.
- 3. § 62-2: Revised CSF, including the upper and lower limits for the AI and upper limits for each impurity.
- 4. § 62-3: Statement describing the precision and accuracy of the analytical methods used to detect the AI and each impurity.
- 5. § 63-9: Vapor Pressure
- 6. § 63-10: Dissociation Constant
- 7. § 63-12: pH (temperature)

SERIES 61: Product Identity and Composition

The applicant has submitted the technical specifications and data sheets of the beginning materials. No additional information is required for this topic.

Refer to Confidential Appendix A for a summary of the new information of the manufacturing process submitted by the registrant. No additional information is required for this topic.

SERIES 62: Analysis and Certification of Product Ingredients

The registrant has explained the sampling procedure utilized in the preliminary analysis previously submitted. The samples were taken from five different batches.

See Confidential Appendix B for a discussion of the test results for the impurity required in the previous review. Since this impurity is clearly not present at levels ≥ 0.1 %, no further information is required.

The submitted CSF is still not acceptable. The applicant has submitted a CSF (EPA Form 8570-4) which includes the limits for in the manufacturing process. Refer to Confidential Appendix B for a disclosure of these limits. A revised CSF is required and should include the upper and lower limits for the active ingredient and upper limits for each impurity.

SERIES 63: Physical and Chemical Characteristics

The following physicochemical properties have been submitted by the registrant. No additional information is required for this topic.

3 63-9	vapor rressure	v o l a t i l e characteristic and the high melting point of the TGAI this requirement is waived.
§ 63-10	Dissociation Constant	pKa = 5.70 @ 20° C
§ 63-12	рН	$pH = 3.4 @ 20^{\circ} C$ (5g/100ml H ₂ 0)

Conclusions and Recommendations

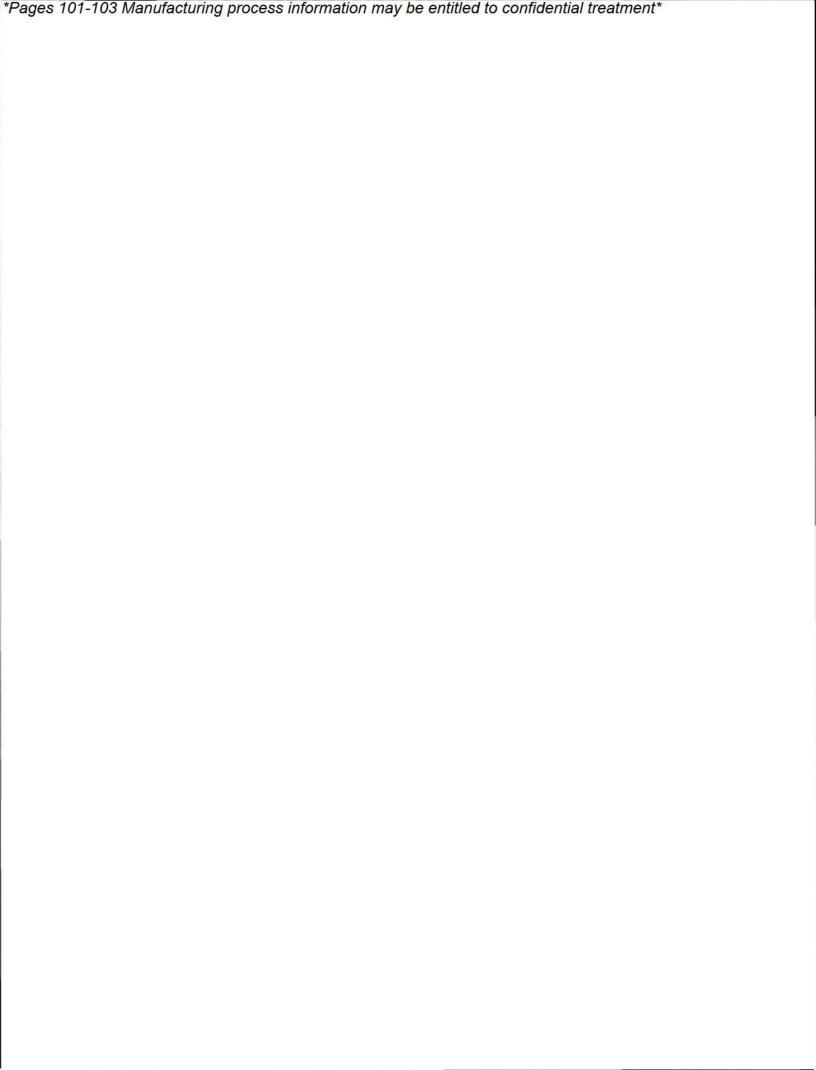
The product chemistry data for Maleic Hydrazide have not been completely satisfied. The following additional information is required.

SERIES 62: Analysis and Certification of Product Ingredients

 A revised CSF is required and should include the upper and lower limits for the active ingredient and upper limits for each impurity.

Attachments:

Confidential Appendix A Confidential Appendix B





fair products, inc.

August 31, 1989

Office of Pesticide Programs
Document Processing Desk (APPL)
Room 266 A, Crystal Mall 2
L921 Jefferson Davis Highway
Arlington, VA 22202

Attention: Mr. Robert Taylor Product Manager 25

Subject: Fair Products response to the scientific review of the application for registration of Maleic Hydrazide 95% technical grade, MRID# 40975901, EPA# 51873-RDW to comply with S.O.P.# 3068.2.

Mr. Taylor:

Enclosed is Fair Products' response to the scientific review documents we received in April 1989. Please note that Fair Products sent the requested samples of T.G.A.I., P.A.I., and analytical grade hydrazine dihydrochloride to Mr. Warren Bontoyan of the analytical chemistry division on 7/14/89 (see attachment 1).

Enclosed are the following:

61-2 - Description of Beginning Materials and Manufacturing Process

- Copies of technical specifications/data sheets describing the composition, properties, and toxicity of each beginning material.
- 2. Statement of whether the process is a batch or continuous process.
- 3. Description of equipment used to produce the product.
- Brief description of any physical conditions (e.g. temperature, pressure, humidity) which are controlled during each step of the process.
- Flow chart with chemical equations of each intended chemical reaction occurring at each step.
- 6. Duration of each step of the process.
- Description of any purification/quality control procedures for the final product.

Fair Products, Inc. Agri-Specialties Division Post Office Box 386, Cary, North Carolina 27512-0386
Telephone: (919) 467-8352 Telex: 5106002142
FAX: 919-467-9142

Manufacturing process information may be entitled to confidential treatment

62-1 - Preliminary Analysis

- Statement clarifying sampling procedure used. If the samples were not taken from five different batches then the data are insufficient and the analysis will have to be resubmitted.
- Test results for the impurities or another test method with quantitative results. All impurities present at levels 0.1% w/w must be identified.

62-2 - Certification of Limits

 Revised Confidential Statement of Formula, including the upper and lower limits for the active ingredient and upper limits for each impurity.

62-3 - Analytical Methods to Verify Certified Limits

- Statement describing the precision and accuracy of the analytical methods used to detect the active ingredient and each impurity.

63 - Physical and Chemical Characteristics

- 1. Vapor Pressure
- 2. Dissociation Constant
- 3. pH Temperature

Series 64

As required for a pesticide registration, samples of the technical grade active ingredient (200 grams) and pure active ingredient (5 grams) have been submitted to the analytical chemistry division.

Fair Products requested on July 27, 1989 that the registration file on our T.G.A.I. product remain open as we were attempting at the time to obtain the remaining information requested from our overseas supplier (see attachment 2).

We hope that this application packet is now complete and ready for review.

If we can be of further assistance, please contact Thomas A. Tucker at 919-467-8352.

Thomas A. Tucker

Sincerely,

Product/Registration Manager

TAT/vb

cc: Laboratory Data Integrity Program (Office of Compliance Monitoring (EN-342) Environmental Protection Agency 401 M. Street, S.W. Washington, DC 20460

SEP 1 9 1989

Thomas A. Tucker Fair Products, Inc. P.O. Box 386 806 Reedy Creek Road Cary, NC 27512

Dear Mr. Tucker:

Subject: Maleic Hydrazide 95% Technical Grade

EPA Registration No. 51873-RN Re: Product Chemistry Data

Your Submission Dated August 31, 1989

Please find enclosed a copy of the Report of Analysis for Compliance with PR Notice 86-5. Your data have been assigned the following Master Record Identification (MRID) numbers:

GRN 61-2 MRID 412296-01 Description of Beginning Materials & Manufacturing Process

GRN 62-1,2,3 MRID 412296-02 Preliminary Analysis, Certification of Limits, and Analytical Methods to Verify Certified Limits

GRN 63 Physical and Chemical Characteristics

Sincerely,

Robert J. Taylor Product Manager (25) Fungicide-Herbicide Branch Registration Division (H7505C)

enclosure

R. Taylor/C. Giles/FHB/PM 25/09-19-89

CONCURRENCES									
SYMBOL	H7505C								
SURNAME	Hy505C								
DATE	9/19/								
EPA Form	13204 (12-70)						OFFICE	106 LE COPY	

U. S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs

FAIR PRODUCTS, INC. 806 REEDY CREEK RD. P.O. #386 CARY, NC 27512 SEP 1 3 1989

Report of Analysis for Compliance with PR Notice 86-5

Thank you for your transmittal of 09/11/89. Our staff has completed a preliminary analysis of the material. The results are provided as follows.

Your submittal was found to be substantially in compliance with the standards for submission of data contained in PR Notice 86-5, with the exception(s) noted below. A copy of your bibliography is enclosed, annotated with the Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents, and correct the noted exception(s) in future data submittals. If deficiencies were found which apply to your overall submission, they are described following this paragraph. If the deficiencies apply to specific studies, they are listed below following the applicable identification number or MRID. Thank you for your cooperation.

Any document which has been assigned a MRID has been accepted under PR Notice 86-5. If any comments related to a MRID appear on this report, they are provided for your information and reference when preparing future submissions.

If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.

MRIDS <u>U1229601</u> <u>E U1229602</u> were all found to be deficient for the following reason/s:

The Confidential Attachment containing information claimed as confidential under FIFRA section 10(d)(1) should be included within the same binding as the body of the study to which it relates.



fair products, inc.

August 31, 1989

Office of Pesticide Programs
Document Processing Desk (APPL)
Room 266 A, Crystal Mall 2
L921 Jefferson Davis Highway
Arlington, VA 22202

Attention: Mr. Robert Taylor Product Manager 25

Subject: Fair Products response to the scientific review of the application for registration of Maleic Hydrazide 95% technical grade, MRID# 40975901, EPA# 51873-RD to comply with S.O.P.# 3068.2.

Mr. Taylor:

Enclosed is Fair Products' response to the scientific review documents we received in April 1989. Please note that Fair Products sent the requested samples of T.G.A.I., P.A.I., and analytical grade hydrazine dihydrochloride to Mr. Warren Bontoyan of the analytical chemistry division on 7/14/89 (see attachment 1).

Enclosed are the following:

41229601

61-2 - Description of Beginning Materials and Manufacturing Process

- Copies of technical specifications/data sheets describing the composition, properties, and toxicity of each beginning material.
- 2. Statement of whether the process is a batch or continuous process.
- 3. Description of equipment used to produce the product.
- Brief description of any physical conditions (e.g., temperature, pressure, humidity) which are controlled during each step of the process.
- 5. Flow chart with chemical equations of each intended chemical reaction occurring at each step.
- 6. Duration of each step of the process.
- Description of any purification/quality control procedures for the final product.

Fair Products, Inc. Agri-Specialties Division Post Office Box 386, Cary, North Carolina 27512-0386
Telephone: (919) 467-8352 Telex: 5106002142
FAX: 919-467-9142

41229602 62-1 - Preliminary Analysis

- Statement clarifying sampling procedure used. If the samples were not taken from five different batches then the data are insufficient and the analysis will have to be resubmitted.
- Test results for the impurities or another test method with quantitative results. All impurities present at levels 0.1% w/w must be identified.

62-2 - Certification of Limits

 Revised Confidential Statement of Formula, including the upper and lower limits for the active ingredient and upper limits for each impurity.

62-3 - Analytical Methods to Verify Certified Limits

 Statement describing the precision and accuracy of the analytical methods used to detect the active ingredient and each impurity.

41229603

63 - Physical and Chemical Characteristics

- 1. Vapor Pressure
- 2. Dissociation Constant
- 3. pH Temperature

Series 64

As required for a pesticide registration, samples of the technical grade active ingredient (200 grams) and pure active ingredient (5 grams) have been submitted to the analytical chemistry division.

Fair Products requested on July 27, 1989 that the registration file on our T.G.A.I. product remain open as we were attempting at the time to obtain the remaining information requested from our overseas supplier (see attachment 2).

We hope that this application packet is now complete and ready for review.

If we can be of further assistance, please contact Thomas A. Tucker at 919-467-8352.

Sincerely,

Thomas A. Tucker

Product/Registration Wahager

TAT/vb

office of Compliance Monitoring (EN-342)
Environmental Protection Agency
401 M. Street, S.W.
Washington, DC 20460



fair products, inc.

July 14, 1989

Environmental Protection Agency Bldg. 306, BARC - EAST Center Rd., Room 113 Beltsville, MD 20705

Attention: Dr. Warren Bontoyan

Subject: Fair Products, Inc. submittal of samples of Maleic

Hydrazide 95% technical grade (200 grams), Maleic Hydrazide 100% standard (5 grams) and Hydrazine Dihydrochloride 100%,

(5 grams) analytical standard.

Dear Dr. Bontoyan:

Enclosed are the samples of Maleic Hydrazide 95% technical grade, Maleic Hydrazide analytical standard, and hydrazine dihydrochloride analytical standard you have been waiting for. We regret the delay in obtaining the samples from overseas.

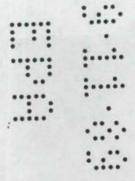
If we can be of any further assistance, please contact the undersigned at 919-467-8352.

Singerely,

Thomas A. Tucker

Product/Registration Manager

TAT/vb





July 27, 1989

Registration Division (TS-767C)
U.S. Environmental Protection Agency
CM #2, 1921 Jefferson Davis Highway
Arlington, Virginia 22202

Attention: Mr. Robert Taylor

Product Manager 25

Subject: Fair Products Application for Registration

of Maleic Hydrazide 95% Technical Grade to comply with S.O.P. Notice 3068.2 (EPA

file symbol 51873-RN), time extension request.

Mr. Taylor:

We are writing to notify you that Fair Products is working to obtain the additional information requested by you to support our registration of Maleic Hydrazide 95% technical grade (EPA file symbol 51873-RN, MRID #40975901).

We have experienced unexpected delays in obtaining information from our supplier who is located overseas and will submit the information as soon as possible. Please keep our registration file open.

Also, note that Fair Products sent samples of T.G.A.I. MH (200 grams), analytical grade MH (5 grams) and analytical grade hydrazine dihydrochloride (5 grams) to Mr. Warren Bontoyan in the analytical chemists' division on 7/14/89.

If we can be of any further assistance please contact Thomas A. Tucker at 919-467-8352.

Sincerely

Thomas A. Tucker Product/Registration Manager



July 14, 1989

Environmental Protection Agency Bldg. 306, BARC - EAST Center Rd., Room 113 Beltsville, MD 20705

Attention: Dr. Warren Bontoyan

Subject: Fair Products, Inc. submittal of samples of Maleic

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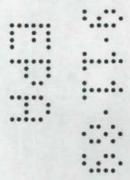
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If we can be of any further assistance, please contact the undersigned at 919-467-8352.

Singerely,

Thomas A. Tucker Product/Registration Manager





July 27, 1989

Registration Division (TS-767C)
U.S. Environmental Protection Agency
CM #2, 1921 Jefferson Davis Highway
Arlington, Virginia 22202

Attention: Mr. Robert Taylor Product Manager 25

Subject: Fair Products Application for Registration

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Sincerely

Thomas A. Tucker ... Product/Registration Manager



July 14, 1989

Environmental Protection Agency Bldg. 306, BARC - EAST Center Rd., Room 113 Beltsville, MD 20705

Attention: Dr. Warren Bontoyan

Subject: Fair Products, Inc. submittal of samples of Maleic Hydrazide 95% technical grade (200 grams), Maleic Hydrazide 100% standard (5 grams) and Hydrazine Dihydrochloride 100%, (5 grams) analytical standard.

Dear Dr. Bontoyan:

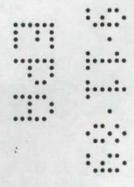
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If we can be of any further assistance, please contact the undersigned at 919-467-8352.

Singerely,

Thomas A. Tucker

Product/Registration Manager





July 27, 1989

Registration Division (TS-767C)
U.S. Environmental Protection Agency
CM #2, 1921 Jefferson Davis Highway
Arlington, Virginia 22202

Attention: Mr. Robert Taylor

Product Manager 25

Subject: Fair Products Application for Registration

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file symbol 51873-RN), time extension request.

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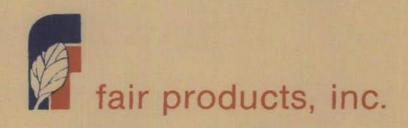
We have experienced unexpected delays in obtaining information from our supplier who is located overseas and will submit the information as soon as possible. Please keep our registration file open.

Also, note that Fair Products sent samples of T.G.A.I. MH (200 grams), analytical grade MH (5 grams) and analytical grade hydrazine dihydrochloride (5 grams) to Mr. Warren Bontoyan in the analytical chemists' division on 7/14/89.

If we can be of any further assistance please contact Thomas A. Tucker at 919-467-8352.

Sincerely,

Thomas A. Tucker Product/Registration Manager



July 27, 1989

Registration Division (TS-767C) U.S. Environmental Protection Agency CM #2, 1921 Jefferson Davis Highway Arlington, Virginia 22202

Attention: Mr. Robert Taylor

Product Manager 25

Subject: Fair Products Application for Registration of Maleic Hydrazide 95% Technical Grade

to comply with S.O.P. Notice 3068.2 (EPA file symbol 51873-RN), time extension request.

Mr. Taylor:

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If we can be of any further assistance please contact Thomas Tucker at 919-467-8352.

Singerely,

Thomas A. Tucker:

Product/Registration Manager

THE PROTECTION OF THE PROTECTI

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PESTICIDES AND TOXIC SUBSTANCES

AUG 2 | 1989

Fair Products, Inc. H. Frank Grainger, President P.O. Box 386 Cary, NC 27511

Subject: Your letter of March 13, 1989

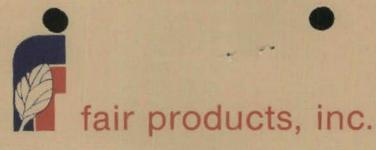
(Maleic Hydrazide) EPA Reg. No. 51873-RD

Dear Mr. Grainger:

A review of our records indicate that your company is in compliance with PR Notice 87-7, Please note the Agency awaits submission of the technical information requested in our letter of April 1989 (see attached). Failure to submit this information could result in the administrative withdrawal of your application.

Sincerely yours,

Robert J. Taylor Product Manager (25) Fungicide-Herbicide Branch Registration Division (H7505C)



January 23, 1989

Mr. Robert Taylor Registration Division (TS-767C) U. S. Environmental Protection Agency CM #2, 1921 Jefferson Davis Highway Arlington, VA 22202

Attention: Mr. Robert Taylor Product Manager 25

Subject: Application for Registration of Maleic Hydrazide 95%

Technical Grade

Dear Mr. Taylor:

Enclosed is Fair Products application package for the registration of Maleic Hydrazide 95% Technical Grade. The package was assembled to comply with S.O.P. notice 3068.2 for registration of pesticide products with substantially similar active ingredients and includes the following:

- 1. Application for pesticide registration form 8570.1
- Certification with respect to citation of data from 8570-29
- 3. Confidential Statement of Formula form 8570-4
- Manufacturing process information
 Physical and chemical properties
- 6. Analytical method for quality control
- 7. Raw data from 5 different lots
- 8. Theoretical discussion of impurities
- 9. Draft labeling

We feel that this product is not significally different from the potassium salt technical MH materials presently registered with the EPA by Uniroyal Chemical Co., Inc. and Drexel Chemical Co. respectively. As you will note we are employing the "cite ail" method of data support since we are members of a consortium which includes ourselves, Uniroyal and Drexel Chemical Companies who in effect own all the present data on MH.

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It should also be noted that Maleic Hydrazide 95% Technical Grade has been used in several end-use products up until PR Notice 87-7 which made it unlawful to incorporate technical materials from un-registered sources into end-use products. The products which had used Maleic Hydrazide 95% as a technical material include Fair Plus EPA# 51873-2, Fair 2 EPA# 51873-9, and FST-7 EPA# 51873-6, manufactured by Fair Products, Inc. and

We are requesting expedition of this registration packet since we need to use this material as our technical MH source for the If we are unable to use this material as our upcoming 1989 season. MH technical material in the 1989 season, we will be forced to purchase raw material from our competitor, Uniroyal Chemical Co. putting Fair Products at a decided economic disadvantage. The only other registered source of raw MH Technical is Drexel Chemical Company. However, Drexel produces a "wet cake" type material which can not be shipped or used in our manufacturing equipment. Therefore, the attempting to register for is the only viable source of technical MH available to us. In order for us to meet the demands of the upcoming tobacco season, we must begin manufacturing our MH products by March '89. This leaves a very limited time frame for arrange opening of Letter of Credit us to place our order with through our bank and arrange shipment schedule from Therefore, we would very much like to expedite the registration process so that we can go ahead and aguire the MH-Technical we need to produce our MH products in 1989.

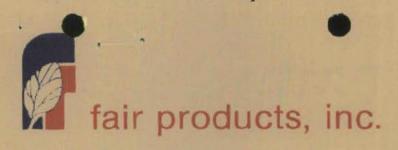
We greatly appreciate your assistance in this matter and would be happy to take any additional steps required to accelerate the registration procedure. If there are any additional requirements or steps to be taken, please contact Thomas A. Tucker at 919-467-8352.

Singerely,

Phomas A. Tycker

Product/Registration Manager

Fair Products, Inc.



January 24, 1989

Mr. Frank Sanders
Branch Chief, Fungicides and Herbicides
Registration Division (TS-767C)
U. S. Environmental Protection Agency
CM #2, 1921 Jefferson Davis Highway
Arlington, VA 22202

Attention: Mr. Frank Sanders

Branch Chief, Fungicides and Herbicides

Subject: Request for Expedition of Fair Products Application

for Registration of Maleic Hydrazide 95% Technical

Grade

Dear Mr. Sanders:

I am writing to request expedition of Fair Products application for registration of Maleic Hydrazide 95% Technical Grade assembled to comply with S. O. P. notice 3068.2 for registration of pesticide products with substantially similar active ingredients. The application packett is enclosed with this letter. We feel that this product is not significally different from the potassium salt technical MH materials presently registered with the EPA by Uniroyal Chemical Co., Inc. and Drexel Chemical Co. respectively. As you will note we are employing the "cite all" method of data support since we are members of a consortium which includes ourselves, Uniroyal and Drexel Chemical Companies who in effect own all the present data on MH.

It should also be noted that Maleic Hydrazide 95% Technical Grade has been used in several end-use products up until PR Notice 87-7 which made it unlawful to incorporate technical materials from un-registered sources into end-use products. The products which had used Maleic Hydrazide 95% as a technical material include Fair Plus EPA# 51873-2, Fair 2 EPA# 51873-9, and FST-7 EPA# 51873-6, manufactured by Fair Products, Inc. and

Product ingredient source information may be entitled to confidential treatment

We are requesting expedition of the registration procedure on the basis of <u>limited</u> sources and economic hardship. Unlike some of our competitors, Fair Products manufactures Tobacco Sucker Controls exclusively. It is our only business. If we are unable to obtain expedited registration of Maleic Hydrazide 95% Technical Grade, we will be forced to purchase raw materials from our competitor, Uniroyal Chemical Co. putting Fair Products at a decided economic disadvantage. In addition, Uniroyal has expressed some doubt about their ability to supply us at all. The only other registered source of Technical MH is Drexel Chemical Co., another competitor. However, Drexel produces a "wet cake" type material which can not be transported or used in our manufacturing equipment. Therefore, the technical material we are attempting to register for

of Technical MH available to us. In order for us to meet the demands of the upcoming tobacco season, we must begin manufacturing of our MH products by March of 1989. This leaves a very limited time frame for us to place our order with arrange opening of Letter of Credit through our bank and arrange shipment schedule from Therefore, we must obtain expedited registration of the product so that we can continue to provide tobacco sucker controls to the farming community in 1989. It may be of interest to note that there are only three companies in the U.S. who may produce MH products, Uniroyal, Drexel and Fair Products. The failure to obtain expedient registration of our Maleic Hydrazide 95% Technical Grade could reduce that number to two.

We greatly appreciate your assistance in this matter and would be happy to take any additional steps required to accelerate the registration procedure. If there are any additional requirements or steps to be taken, please contact Thomas A. Tucker at 919-467-8352.

Sincerely,

Thomas A. Tucker

Product/Registration Manager

Pair Products, Inc.

Mr. Thomas A. Tucker Fair Products, Inc. 806 Reedy Creek Road Cary, NC 27512

Dear Mr. Tucker:

Subject: Maleic Hydrazide 95% Technical Grade EPA File Symbol 51873-RN Re: New Submission For Registration Your Submission Dated January 23, 1989

The scientific review and evaluation of the subject amendment have been completed. The following are our conclusions or comments.

Your submission is unacceptable. The following addition data are required before your product can be registered.

61-2 - Description of Beginning Materials and Manufacturing Process

- Copies of technical specifications/data sheets describing the composition, properties, and toxicity of each beginning material.
- 2. Statement of whether the process is a batch or continuous process.
- 3. Description of equipment used to produce the product.
- 4. Brief description of any physical conditions (e.g., temperature, pressure, humidity) which are controlled during each step of the process.
- Flow chart with chemical equations of each intended chemical reaction occurring at each step.
- 6. Duration of each step of the process.
- Description of any purification/quality control procedures for the final product.

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CONCURRENCES	
SYMBOL H7505C	
DATE 3-28-89	122
EPA Form 1320-1 (12-70)	OFFICIAL FILE COPY

62-1 - Preliminary Analysis

- Statement clarifying sampling procedure used. If the samples were not taken from five different batches then the data are insufficient and the analysis will have to be resubmitted.
- Test results for the impurities or another test method with quantitative results. All impurities present at levels 0.1% w/w must be identified.

62-2 - Certification of Limits

- Revised Confidential Statement of Formula, including the upper and lower limits for the active ingredient and upper limits for each impurity.

62-3 - Analytical Methods to Verify Certified Limits

 Statement describing the precision and accuracy of the analytical methods used to detect the active ingredient and each impurity.

63 - Physical and Chemical Characteristics

- 1. Vapor Pressure
- 2. Dissociation Constant
- 3. pH Temperature

Series 64

As required for a pesticide registration, samples of the technical grade active ingredient (200 grams) and pure active ingredient (5 grams) should be submitted to the following address:

Active Ingredient Program
Attention: Head, Analytical Chemical Section
Analytical Chemistry Branch
Biological and Economic Analysis Division
Office of Pesticide Programs
Environmental Protection Agency
Building 306 - BARC East
Beltsville, MD 20705

Sincerely yours,

Robert J. Taylor Product Manager (25) Pungicide-Herbicide Branch Registration Division (H7504C)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

Lynn

UBSTANCES

	PESTICIDES AND TOXIC SUBSTANC
MEMORANDU	<u>IM</u>
SUBJECT:	Request to Expedite Review Product Chemistry/Precautionary Label Review for Maleic Hydrazide 95% Technical Grade
	EPA Identification No. 51873-RN
	Submitted to RSB on: 2 /8 /89 by PM 25
4	DECISION MEMORANDUM
FROM:	Frank Sanders, Chief Fungicide-Herbicide Branch Ferial Bishop, Chief
TO:	Ferial Bishop, Chief Registration Support Branch
We have c	is a request to expedite the review for the subject application. checked the applicable box(es) which identifies the reviews we wish se on an expedited basis.
<u>/X/</u>	Product Chemistry Review
	Precautionary Labeling Review
We w	ould appreciate getting these reviews no later than 3 / 7 / 89.
An e	expedite is being requested for the following reason(s).
the tecl	The Maleic Hydrazide 95% Technical Grade is the only source of Registrant's technical material. Without a registration of MH hnical material, the company will be unable to supply their tomer's need in 1989. If this product is not registered this ld results in economic hardship for the company.
-	
_	AR 18 ======
CONCUR:	NCUR: ricd 3/15/89 Inable to complete by 3/7. Will make a course of fort to complete by 3/3/1.
DO NOT CO	NCUR: Mid 5/15/89 Inable to complete by 3/7. Will mike
DATE:	certify of the costysein de 3/31.
	Fran Bradley
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PESTICIDES AND TOXIC SUBSTANCES

MAR 22 1989

MEMORANDUM

FROM:

Connie B. Welch, Chemist Connie B. Stelch Product Chemistry Paris Product Chemistry Review Section Registration Support Branch

Registration Division (H7505C)

TO: Robert J. Taylor, PM 25

> Fungicide-Herbicide Branch Registration Division (H7505C)

THRU:

Product Chemistry Review Section Syra W Bradley
Registration Support Branch
Registration Division Registration Division (H7505C)

Ferial S. Bishop, Chief THRU:

Registration Support Branch

Registration Division (H7505C)

Requestor: Fair Products, Inc.

EPA Registration No.: 51873-RN

EPA Accession No.: 409759-01

Pesticide Chemical Code: 051501

Company Code: MH

CAS Registry No .: 123-33-1

Chemical Name: 1,2-dihydro-3,6-pyridazinedione

Common/Trade Name: Maleic Hydrazide

Use: Herbicide

Introduction

This submission is for Maleic Hydrazide 95% Technical Grade. All product chemistry data requirements pertaining to the technical grade active ingredient as described in 40 CFR 158.120 must be met to achieve full registration.

Product Identity and Composition

61-1 - Product Identity and Disclosure of Ingredients

Maleic Hydrazide is the name of the active ingredient found in the technical which is produced by the

Other identifying names include:

1,2-dihydro-3,6-pyridazinedione, maleic acid hydrazide, 6-hydroxy-3,2(H)-pyridazione, MH.

Empirical Formula: C4H4N2O2

Molecular Weight: 112.1

CAS Registry No.: 123-33-1

Pesticide Chemical Code: 051501

Information regarding the identity of the impurities found in Maleic Hydrazide is given in Confidential Appendix A. No information was given on the Confidential Statement of Formula.

 Copies of technical specifications/data sheets describing the composition, properties, and toxicity of each beginning material.

B. Manufacturing Process

 Statement of whether the process is a batch or continuous process.

2. Description of equipment used to produce the product.

 Brief description of any physical conditions (temperature, pressure, humidity) which are controlled during each step of the process.

4. Flow chart with chemical equations of each intended chemical reaction occurring at each step.

5. Duration of each step of the process.

6. Description of any purification/quality control procedures for the final product.

61-3 - Discussion of Formation of Impurities

A theoretical discussion of the impurities found in Maleic Hydrazide is given. Refer to Confidential Appendix A for the disclosure of these impurities. The sum of the quantities listed for the impurities in addition to the active ingredient is not equivalent to 100 percent. Additional information concerning the missing ingredient(s) is required.

Analysis & Certification of Product Ingredients

62-1 - Preliminary Analysis

The applicant has submitted the results of five samples representative of five different locations in the same production lot. These samples were analyzed for the active ingredient and

Manufacturing process information may be entitled to confidential treatment

Manufacturing process information may be entitled to confidential treatment

-4-

content. Refer to Confidential Appendix B for the results of the analysis. No results were submitted for the tests.

Maleic Hydrazide (Active Ingredient)

The active ingredient was identified by ultraviolet (UV) absorption. A Shimazu 210A type spectrophotometer was used for the analyses. While heating, one gram of the sample is dissolved in a solution of 50 milliliters (mls) of water and one of 8 N-potassium hydroxide. The solution is diluted with water to 500 mls while cooling. Five mls of this solution is added to 50 mls of 1M H₂SO₄; after which, the solution is further diluted to 500 mls with water.

The absorbance of the standard and sample is measured at 302 nm.

MH (%) = Absorbance of Sample x 100
Absorbance of Standard



Manufacturing process information may be entitled to confidential treatment

62-2 - Certification of Limits

The applicant has submitted a CSF (EPA Form 8570-4) which includes the limits for each in the formulation. A revised CSF is required and should include the upper and lower limits for the active ingredient and upper limits for each impurity.

62-3 - Analytical Methods to Verify Certified Limits

Analytical methods and test results were submitted for Maleic Hydrazide, which was analyzed for the active ingredient and each impurity. Refer to 62-1 Preliminary

Inert ingredient information may be entitled to confidential treatment

Analysis for a discussion of the methods used. The following additional information is required:

 A statement describing the precision and accuracy of the analytical method used to detect the active ingredient and each impurity.

63 - Physical and Chemical Characteristics

Summarized below are several physicochemical properties of the technical grade active ingredient as furnished by the applicant.

(40	lines Reference No. CFR 158.120) and	
Nan	me of Property	Description
63-2	- Color	TGAI - White
63-3	- Physical State	TGAI - Crystalline powder
63-4	- Odor	TGAI - Odorless
63-5	- Melting Point	TGAI - 260 °C
63-6	- Boiling Point	TGAI - Solid
63-7	- Density, Bulk Density, or Specific Gravity	TGAI - 1.6
63-8	- Solubility	TGAI - 1 g/250 ml water; 1% in ethanol; 2.4% in dimethyl- formamide (25 °C)
63-9	- Vapor Pressure	TGAI - Not given
63-10	- Dissociation Constant	TGAI - Not given
63-11	- Octanol/Water Partition Coefficient	TGAI - Kow - 0.21, pH 5; Kow - 0.027, pH 7; Kow - 0.00385, pH 9
63-12	- pH	TGAI - 2.7 to 3.4 (5 g/100 ml water)
63-13	- Stability	TGAI - Stable to hydrolysis; decomposed by strong acids with release of nitrogen

Recommendations

The product chemistry data requirements for Maleic Hydrazide have not been completely satisfied. The following additional data are required before receiving full registration:

- 61-2 Description of Beginning Materials and Manufacturing Process
 - Copies of technical specifications/data sheets describing the composition, properties, and toxicity of each beginning material.
 - Statement of whether the process is a batch or continuous process.
 - Description of equipment used to produce the product.
 - Brief description of any physical conditions (e.g., temperature, pressure, humidity) which are controlled during each step of the process.
 - 5. Flow chart with chemical equations of each intended chemical reaction occurring at each step.
 - 6. Duration of each step of the process.
 - Description of any purification/quality control procedures for the final product.

62-1 - Preliminary Analysis

- Statement clarifying sampling procedure used. If the samples were not taken from five different batches then the data are insufficient and the analysis will have to be resubmitted.
- 2. Test results for the impurity or another test method with quantitative results. All impurities present at levels 0.1% w/w must be identified.

62-2 - Certification of Limits

 Revised CSF, including the upper and lower limits for the active ingredient and upper limits for each impurity.

Manufacturing process information may be entitled to confidential treatment

62-3 - Analytical Methods to Verify Certified Limits

- Statement describing the precision and accuracy of the analytical methods used to detect the active ingredient and each impurity.

63 - Physical and Chemical Characteristics

- 1. Vapor Pressure
- 2. Dissociation Constant
- 3. pH Temperature

Series 64

As required for a pesticide registration, samples of the technical grade active ingredient (200 grams) and pure active ingredient (5 grams) should be submitted to the following address:

Active Ingredients Program
Attention: Head, Analytical Chemistry Section
Analytical Chemistry Branch
Biological and Economic Analysis Division
Office of Pesticide Programs
Environmental Protection Agency
Building 306 - BARC East
Beltsville, MD 20705

Attachments:

Confidential Appendix B
Product Chemistry Information Form A
Product Chemistry Information Form B

Confidential Appendix A

PRODUCT CHEMISTRY INFORMATION FORM A

1.	Product NameMaleic Hydrazide		
2.	EPA Reg. No. (if known) 51873-RN		
3.	Registrant Name Fair Products		.5
4.	Active Ingredient(s) 1,2-dihydro-3,6-pyridazines	dione	
INF	ORMATION REQUESTED OF REGISTRANT	DA'	
		Req.	Rec.
1.	Safety, Handling, & Storage Data		
2.	Analytical Method for Active Ingredient (A.I.)		
3.	Analytical Method for Specific Impurity	x	
4.	Analytical Grade Standard of A.I.		
5.	Analytical Standard of Specific Impurity*		
6.	Technical Grade of A.I.*	X	
7.	MUPS Grade Material With A.I.*		
8.	- EUPS Grade Material With A.I.*		
9.	Melting Point		MA COL
0.	Boiling Point		
1.	Solubility of A.I.		
2.	Spectral Data, IR		
	MS		
	NMR		
3.	Chromatographic Data, GLC		
	HPLC		
4.	Other		

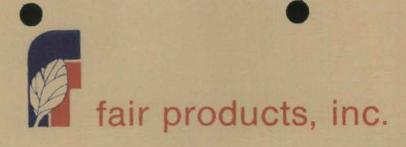
PRODUCT CHEMISTRY INFORMATION FORM B Request for Laboratory Evaluation

1.	FP A Reg. No		
2.	RD File No.		
3.	ACS Lab No.		
4.	Date Request Sent to ACS		
5.	Date Received by ACS		
6.	Date Assigned		
7.	Date of Follow-Up		
8.	Date Reported to RD		
INF	FORMATION REQUESTED OF ACS	DA' Req.	TE Rec.
1.	Validation of Active Ingredient Method	_ X	- /2 109
2.	Validation of Method for Specific Impurity	X	
3.	Validation of Melting Point	A GARAGE	MA 55
4.	Validation of Boiling Point		
5.	Validation of Spectral Data, IR		
	MS		
	NMR		
6.	Validation of Chromatographic Data, GLC		
	HPLC		

COMMUNICATION LOG ON REVERSE

7. Other





STUDY TITLE

FAIR PRODUCTS APPLICATION FOR REGISTRATION OF MALEIC HYDRAZIDE 95% TECHNICAL GRADE TO COMPLY WITH S.O.P. NOTICE 3068.2

DATA REQUIREMENT

NA

AUTHOR

P. O. BOX 386 CARY, NC 27512

REPORT COMPLETED

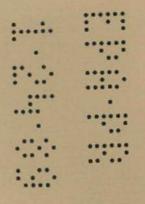
1/23/89

PERFORMING LABORATORY

NA

LABORATORY PROJECT ID

NA



	Input	Date
CODING FORM FOR APPLICATIONS FOR REGISTRATION/AMENDMENTS		
File Symbol/Reg. No. 5/873-RN PM 25 8 Action (Code	
10 Descriptor (Amend/Resubmisions only)		
5 Intrastate Call-in (Y) Yes 15 Child-resistant		Certification
/_/ (N) No Packaging	(S)	Service Person
20 Registration Type:		Non-residentia
(1) Conditional (2) Unconditional		Use Only
25 Proposed Classification: 30 Final Classification:	(N)	Not-Applicable
(R) Restricted (R) Restricted		
(G) General (N) Not Classified		
35 Date on Application: 04 EPA Received Date: 40	Date Rece	ived by PM
01 1 210 8 19 011 2 14 819 MD DAY YR		
MO DAY YR MO DAY YR	MO D	AY YR
80 Method of Support:		
(1) Cite-All (6) Owner Submission		
(4) Not Applicable (7) Total Submission		
[(5) Not Submitted [(8) Selective Method		
	RESPONSE	RESPONSE DATE
RD		
rin		
PL		
CH CH		
EF		
108 Status:		
III5 FINAL Response II20 Response	. 1 .	1.1

75-DAY RESPONSE DUE DATE: //(Y) Yes //(N) No

TABLE OF CONTENTS

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2	CERTIFICATION WITH RESPECT TO CITATION OF DATA	3-4
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4	MANUFACTURING PROCESS	7-8
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8	THEORETICAL DISCUSSION OF IMPURITIES	27-28
9	DRAFT LABELING (5 COPIES)	29-39
10	CONFIDENTIAL ATTACHMENT NUMBER 1 (CONFIDENTIAL STATEMENT OF FORMULA)	40-43
11	CONFIDENTIAL ATTACHMENT NUMBER 2 (MANUFACTURING PROCESS)	44-48
12	CONFIDENTIAL ATTACHMENT NUMBER 3 (THEORETICAL DISCUSSION OF IMPURITIES)	49-52



CONFIDENTIAL ATTACHMEN;

fair products, inc.

STUDY TITLE

FAIR PRODUCTS APPLICATION FOR REGISTRATION OF MALEIC HYDRAZIDE 95% TECHNICAL GRADE TO COMPLY WITH S.O.P. NOTICE 3068.2

DATA REQUIREMENT

NA

CA 409759-01

AUTHOR

P. O. BOX 386 CARY, NC 27512

REPORT COMPLETED

1/23/89

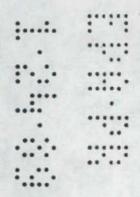
PERFORMING LABORATORY

NA

LABORATORY PROJECT ID

NA

10414





January 23, 1989

Mr. Robert Taylor Registration Division (TS-767C) U. S. Environmental Protection Agency CM #2, 1921 Jefferson Davis Highway Arlington, VA 22202

Attention: Mr. Robert Taylor

Product Manager 25

Subject: Application for Registration of Maleic Hydrazide 95%

Technical Grade

Dear Mr. Taylor:

Enclosed is Fair Products application package for the registration of Maleic Hydrazide 95% Technical Grade. The package was assembled to comply with S.O.P. notice 3068.2 for registration of pesticide products with substantially similar active ingredients and includes the following:

- 1. Application for pesticide registration form 8570.1
- Certification with respect to citation of data from 8570-29
- Confidential Statement of Formula form 8570-4
- Manufacturing process information
 Physical and chemical properties
- 6. Analytical method for quality control
- 7. Raw data from 5 different lots
- 8. Theoretical discussion of impurities
- 9. Draft labeling

Product ingredient source information may be entitled to confidential treatment

It should also be noted that Maleic Hydrazide 95% Technical Crade has been used in several end-use products up until PR Notice 87-7 which made it unlawful to incorporate technical materials from un-registered sources into end-use products. The products which had used Maleic Hydrazide 95% as a technical material include Fair Plus EPA# 51873-2, Fair 2 EPA# 51873-9, and FST-7 EPA# 51873-6, manufactured by Fair Products, Inc. and and

We are requesting expedition of this registration packet since we need to use this material as our technical MH source for the upcoming 1989 season. If we are unable to use this material as our MH technical material in the 1989 season, we will be forced to purchase raw material from our competitor, Uniroyal Chemical Co. putting Fair Products at a decided economic disadvantage. The only other registered source of raw MH Technical is Drexel Chemical Company. However, Drexel produces a "wet cake" type material which can not be shipped or used in our manufacturing equipment. Therefore, the technical material we are attempting to register for

is the only viable source of technical MH available to us. In order for us to meet the demands of the upcoming tobacco season, we must begin manufacturing our MH products by March '89. This leaves a very limited time frame for us to place our order with arrange opening of Letter of Credit through our bank and arrange shipment schedule from to us. Therefore, we would very much like to expedite the registration process so that we can go ahead and aquire the MH-Technical we need to produce our MH products in 1989.

We greatly appreciate your assistance in this matter and would be happy to take any additional steps required to accelerate the registration procedure. If there are any additional requirements or stepsy to be taken, please contact Thomas A. Tucker at 919-467-8352.

sinderely,

Phomas A. Tucker

Product/Registration Manager

Fair Products, Inc.

	United S Off	States Environmenta fice of Pesticide Prog Washington, DC	rams (TS-767) 20460		OPP Identifie	
\$EPA	Application		le: X Regi	stration ndment		
		Section	1			
Company/Product Number	2. Date		3. Product Manage	ır	4. Proposed 0	Deat
51873-RN			Robert	Taylor	X Genera	Rest
P. O. Box	ucts, Inc. 386 Creek Rd.					
Check if this is a new address Product Name Maleic Hyd	drazide 95% '					
Subject	Secur	on II - Amendme	nt information		Date of Letter	
Resubmission in response to Agency letter	Final printed	label to Agency letter	Other (expla	in helow)		
		Section	III		In Transition	
		Section		kaging	2. Type of Co	ntainer
	Unit Packaging		Water-Soluble Pac		Metal	
hild-Resistant Packaging	Unit Packaging	Section	Water-Soluble Pac	kaging	Metal Plastic	
	Unit Packaging X Yes		Water-Soluble Pac		Metal Plastic Glass X Paper	
Yes No Location of Net Contents Informa	Unit Packaging X Yes If "Yes," Unit package wgt 44 1b.	No. per container	Water-Soluble Pac	No	Metal Plastic Glass X Paper	
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& EPA

United States Environmental Protection Agency Washington, DC 20460

Certification with Respect to Citation of Data

Form Approved OMB No. 2070-0060 Approval expires 9-30-90

Applicant's Name and Address

Fair products, Inc. P. O. Box 386 806 Reedy Creek Rd. 27512 Cary, NC

EPA File Symbol/Registration Number

51873-RM

Product Name

Maleic Hydrazide 95% Technical Grade

Date of Application

1/20/89

- 1. This application is supported by all data submitted or cited in the application. In addition, if cite-all options are indicated, this application is supported by all data in the Agency's files that concern the properties or effects of this product or of any other product that is identical or substantially similar, and that is one of the types of data that would be required to be submitted if this application sought the initial registration of a product of identical or similar composition and intended uses under the data requirements in effect on the date of approval of this application.
- 2. I certify that, for each study cited in support of this application for registration that is an exclusive use study, I am the original data submitter, or have obtained the written permission of the original data submitter to cite that study.
- 3. I certify that, for each study cited in support of this application for registration that is not an exclusive use study:

I am the original data submitter; or I have obtained the written permission of the original data submitter to cite that study; or

I have notified in writing the companies who have submitted data I have cited to support this application and have offered to: (a) Pay compensation for those data in accordance with section 3(c)(1)(D) and 3(c)(2)(D) of the Federal Insecticide, Fungicide and Rodenticide Act; and (b) Commence negotiations to determine which data are subject to the compensation requirement of FIFRA and the amount and terms of compensation due, if any. The companies I have notified are: (Check one)

- All companies listed on the Pesticide Data Submitters List for all active ingredients contained in my product (cite-all method or cite-all option under Selective Method). (Also sign the General Offer to Pay. Statement below.)
- Those companies who have submitted the studies which I have cited (Selective method).

Signature

Name and Title

Date

Thomas A. Tucker Product Registration 1/20/89

General Offer to Pay: I hereby offer and agree to pay compensation to other: persons, with regard to the approval of this application, to the extent required by FIFRA sec. 3(c)(1)(D) and 3(c)(2)(D).

Signature

Name and Title

Thomas A. Tucker

Product/Registration Mgr. 1/20/89

EPA Form 8570-25 (7-86)

147

U. S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs

FAIR PRODUCTS, INC. 806 REEDY CREEK RD. P.O. #386 CARY, NC 27512

Report of Analysis for Compliance with PR Notice 86-5

Thank you for your transmittal of 01/24/89. Our staff has completed a preliminary analysis of the material. The results are provided as follows.

Your submittal was found to be substantially in compliance with the standards for submission of data contained in PR Notice 86-5, with the exception(s) noted below. A copy of your bibliography is enclosed, annotated with the Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents, and correct the noted exception(s) in future data submittals. If deficiencies were found which apply to your overall submission, they are described following this paragraph. If the deficiencies apply to specific studies, they are listed below following the applicable identification number or MRID. Thank you for your cooperation.

Any document which has been assigned a MRID has been accepted under PR Notice 86-5. If any comments related to a MRID appear on this report, they are provided for your information and reference when preparing future submissions.

If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.

In the transmittal document, please include a clear list or bibliography of the studies which are being submitted in the data package.

MRID 40975901

Data Requirement Listings, Data Call-In Coversheets, EPA form 8570-1, EPA form 8570-4 and labels are considered to be administrative material rather than data and should not be bound as part of a study.

The Confidential Attachment should be paginated separately from the body of the study. See section D.3 of the PR Notice for guidance.

The title page should precede all other pages in the study, including the table of contents.

When data confidentiality is claimed under FIFRA Section 10 (d)(1)(A), (B), or (C), all confidential information must be excised from the body of the study and placed in a Confidential Attachment. See pages 8 and 15 of PR Notice 86-5.

The Confidential Attachment must be identified by a cover sheet which precedes all other pages in the attachment.

Always submit the minimum requirement of 3 complete copies of data for resubmissions as well as new submissions.



January 23, 1989

Mr. Robert Taylor Registration Division (TS-767C) U. S. Environmental Protection Agency CM #2, 1921 Jefferson Davis Highway Arlington, VA 22202

Attention: Mr. Robert Taylor Product Manager 25

Subject: Application for Registration of Maleic Hydrazide 95% Technical Grade

Dear Mr. Taylor:

4097590 Enclosed is Fair Products application package for the registration of Maleic Hydrazide 95% Technical Grade. The package was assembled to comply with S.O.P. notice 3068.2 for registration of pesticide products with substantially similar active ingredients and includes the following:

- 1. Application for pesticide registration form 8570.1
- Certification with respect to citation of data from 8570-29
- 3. Confidential Statement of Formula form 8570-4
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- 6. Analytical method for quality control
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- 8. Theoretical discussion of impurities
- 9. Draft labeling



January 23, 1989

Mr. Robert Taylor Registration Division (TS-767C) U. S. Environmental Protection Agency CM #2, 1921 Jefferson Davis Highway Arlington, VA 22202

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January 23, 1989

Mr. Robert Taylor Registration Division (TS-767C) U. S. Environmental Protection Agency CM #2, 1921 Jefferson Davis Highway Arlington, VA 22202

Attention: Mr. Robert Taylor Product Manager 25

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Technical Grade

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STUDY TITLE

FAIR PRODUCTS APPLICATION FOR REGISTRATION OF MALEIC HYDRAZIDE 95% TECHNICAL GRADE TO COMPLY WITH S.O.P. NOTICE 3068.2

DATA REQUIREMENT

NA

AUTHOR

P. O. BOX 386 CARY, NC 27512

REPORT COMPLETED

1/23/89

PERFORMING LABORATORY

NA

LABORATORY PROJECT ID

NA

10F28

STATMENT OF DATA CONFIDENTIALITY CLAIMS

Information contained within these documents claimed confidenial on the basis of its falling within the scope of FIFRA Sec. 10 (d) (1) (A), (B), or (C) has been removed to a confidential appendix, and is cited by cross-reference number in the body of the study.

COMPANY:	FAIR	PRODUCTS INC.	A		
COMPANY	AGENT:	Thomas A. Tucker		DATE:_	1-23-89
Product	/Regist	tration Manager	1//	12	L.
	T	TLE	1000	SIGNATUR	RE .

